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Volume 1:
Overview and
Recommendations

Report of the Secretary's Task Force on **Youth Suicide**

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

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Volume 1:
Overview and
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January 1989

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

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LETTER OF TRANSMITTAL

The Honorable Otis R. Bowen, M.D.
Secretary of Health and Human Services
Washington, D.C. 20201

Dear Mr. Secretary:

On behalf of the Task Force on Youth Suicide, I am pleased to submit our report and recommendations for your review and consideration. The deliberations of this task force have confirmed that suicide is indeed a perplexing problem which, for health professionals and laymen alike, defies ready solutions. Suicide rates among 15- to 24-year-olds have more than doubled during the past 30 years; now suicide ranks as the second leading cause of death for that age group and accounts for more than 200,000 potential years of life lost each year. These high suicide rates among the Nation's youth are unacceptable when we have been able to decrease the toll from almost every other leading cause of death.

The seriousness of the problem prompted former Secretary Margaret Heckler to convene a departmental level task force to advance our understanding of the causes of suicide and to find ways to reverse the tragically high levels. With your encouragement and support we have completed our task. In preparing our recommendations we have reviewed the available body of knowledge in youth suicide, and we have held a series of forums to solicit the best information and advice from the country's leading educators; biological, social, and behavioral scientists; other care providers; and leading international experts. We have commissioned papers to close gaps in our knowledge and to gain the insights of those dedicated workers who work with troubled youth on the community level.

Reducing youth suicide has already been given a high priority in the public health "Objectives for the Nation" to be achieved by 1990. The objective calls for a suicide rate among persons 15 to 24 years of age of less than 11 per 100,000. However, this objective stands out prominently as one we probably will not be able to reach within the next 3 years. The comprehensive nature of our recommendations indicates the scope of the effort that is needed if we wish to attain this objective.

This 4-volume report is the product of a major effort in synthesizing the present state of knowledge about youth suicide. It contains extensive background information examining current knowledge on the three major themes of our endeavor: Identifying risk factors for youth suicide, reviewing prevention and intervention activities, and defining strategies for the future.

While this report includes recommendations for a wide variety of organizations in both public and private sectors, there are four steps that are most appropriate for you and the Department of Health and Human Services to undertake immediately. First, this task force report should be quickly and widely disseminated. It is the most comprehensive review of information about youth suicide that is available; this scientific information is up to date and it will become outdated and lose some of its value if it is not distributed in a timely fashion. In this effort, you should involve those organizations that participated in the formulation of the task force recommendations, such as the American Association of Suicidology, the National Association of Social Workers, the American Psychiatric Association, the American Psychological Association, the American Medical Association, the National Education Association, the National Parent Teachers Association, and others, and at the same time, ask those organizations to integrate these recommendations into their ongoing programs. These organizations have made impor-

tant contributions to the task force's work and play a very important role in youth suicide prevention.

Second, we urge you to create a focus for youth suicide within the Department. An interagency council located at the Public Health Service or Office of the Assistant Secretary for Health level, staffed by the Alcohol, Drug Abuse, and Mental Health Administration could monitor our progress toward preventing youth suicide and ensure the coordination necessary to address this problem most efficiently. The Council on Alzheimer's Disease might serve as a model. Since the prevention of youth suicide also involves programs for criminal justice, education, and youth employment, representatives of the Departments of Justice, Education, and Labor should be invited to participate on this council. Appropriate nongovernmental agencies might also be invited to attend. The council should be asked to prepare an annual report for the Secretary on progress toward preventing youth suicide.

Third, we recommend that departmental agencies which deal with problems of youth and adolescence (such as teenage pregnancy, substance abuse, and interpersonal violence) integrate information about youth suicide into their ongoing and new programs. In addition, information about youth suicide could be disseminated through information networks and clearinghouses which already exist to address these problem areas.

Fourth, specific agencies should make youth suicide a priority concern by submitting to you in annual progress report a listing of their ongoing and new programs which might appropriately address youth suicide. Some examples of the ways agencies could address youth suicide include:

Indian Health Service. The Indian Health Service can address suicide prevention in developing clinical programs to address problems of Native American youth.

Health Resources and Services Administration. The Health Resources and Services Administration could disseminate information about youth suicide to the many "gatekeepers" involved in their programs.

Alcohol, Drug Abuse, and Mental Health Administration. Information about youth suicide could be disseminated to the States through the Alcohol and Drug Abuse and Mental Health Services Block Grant mechanism. Institutes could coordinate efforts to issue Requests for Applications and Proposals in youth suicide research and sponsor joint research projects with the Centers for Disease Control.

Centers for Disease Control. Resources should be made available for helping State and local health departments identify and respond to youth suicide clusters.

Administration for Children, Youth, and Families. The Administration for Children, Youth, and Families can continue to address youth suicide by disseminating the results of successful projects funded by the runaway and homeless youth program. The administration also could continue to work to encourage early intervention for the development of high self-esteem among Head Start students in order to prevent later dysfunction.

In addition to serving as a resource for a departmentwide strategy to reduce suicide, we anticipate that these volumes will act as a much- needed source of information and guidance to health, education, and social service workers at the State and community levels who wish to improve the services they provide to the youth of America. We believe that many young people who have entertained thoughts of suicide can be redirected toward alternative life-sustaining choices.

The task force recognizes that success in this effort will not depend solely on the amount

or type of Federal resources available, nor will success be achieved with short-term efforts. In large part, success will depend on the ability of government to work with key individuals and programs in the private sector and on the ability of these programs to affect the lives of individuals and families. Ultimately, suicide prevention will require ongoing, long-term approaches and will hinge on the dedication and involvement of individuals, families, social and civic organizations, and citizen volunteers in local communities.

We urge you to continue your commitment to meeting this public health goal by assigning responsibility for implementing these recommendations to the appropriate departmental agencies and by identifying an individual who will coordinate the Department's suicide programs and prepare a yearly progress report for you.

Sincerely yours,

Shervert H. Frazier, M.D.
Chairman

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EXECUTIVE SUMMARY

BACKGROUND

The suicide rate for young people between ages 15 and 24 almost tripled during the past 30 years. Suicide is now the second leading cause of death for young people in this age group. This sharp increase in suicide rates in one segment of the population, especially when rates for most other causes of death were decreasing in the United States, prompted the Secretary of Health and Human Services to organize a task force to investigate this pressing problem.

The task force was charged with investigating what could be done to prevent youth suicide. In the past, suicide had traditionally been considered a mental health problem of older adults. Its prevention was based on the detection and treatment of psychological illness in adults, most commonly depression. Beginning in 1980, however, more than half of all suicides occurred among persons under the age of 40. In addition, evidence suggested that depression was less frequently associated with suicide in young people than adults. In light of these findings, what reason was there to think that prevention based on detecting and treating depressed adults could work for nondepressed young people? Few research studies had examined suicide and suicide prevention in young people; nor was it known whether inferences drawn from research on adults could be applied to youth.

The major functions of the task force were to review, assess, and consolidate the available information about suicide; provide forums for communication among health care professionals, educators, researchers, social service workers, and families; and recommend activities to address the problem. The task force was also charged with coordinating suicide activities among Federal agencies, Congress, State and local governments, private agencies, and professional organizations.

FINDINGS

In fulfilling its charge, the task force concluded that:

- The state of knowledge about youth suicide--what causes it, who is at greatest risk, and how to prevent it--is much less developed than that of many other health problems.
- Acquiring this knowledge will require a carefully coordinated, sustained program of focused research and an organized multidisciplinary approach that integrates the diverse interests in the field.
- We need to evaluate rigorously the effectiveness of various interventions designed to prevent suicide.
- An effective approach to suicide prevention will need to involve committed individuals in health, mental health, education, and social services in both the public and private sector.

We know that certain characteristics, called risk factors, are associated with an increased likelihood of suicide in a population. Some possible risk factors include parental loss, family disruption, emotional stress, a history of abuse and neglect, homosexuality, being a friend or a family member of a suicide victim, previous suicide attempts, mental illness or drug dependency in a family member,

chronic or acute alcohol and drug abuse, and access to firearms.

While mental illness is often related to suicide, only a portion of the young people who commit suicide have been diagnosed as mentally ill. Many young suicide victims did not have a major mental illness but had a history of conduct disorders characterized by impulsive, aggressive, antisocial behavior, often complicated by substance abuse. Another large group of young suicide victims did not fit these characteristics but included socially inhibited youngsters who were perfectionists or prone to extreme anxiety in the face of social or academic challenges. The breakup of a relationship, a recent arrest, and being the victim of beating, assault, or rape are events that most commonly precipitate suicide. Reduced levels of 5-hydroxyindoleacetic acid (5-HIAA), a serotonin metabolite found in the spinal fluid, are associated with suicide and other violent acts by some young people.

Guns are the most frequently used means for suicide for both males and females, followed by hanging, poisoning by drug overdose, and jumping from high places. Five times as many males as females in the 15 to 24 age group commit suicide. An estimated 20 or more suicides are attempted for every one completed. Approximately three times as many females attempt suicide as males.

RECOMMENDATIONS

After extensively reviewing the medical and sociological literature, and obtaining the best advice from experts in a broad range of disciplines, the task force developed six recommendations that address the most urgent needs for research, education, and services to prevent youth suicide. During this process, we actively sought to involve many individuals and interest groups at the national and community level, including health and mental health care providers, representatives of suicide prevention advocacy groups and volunteers, educators, social and behavioral scientists, and members of families in which a suicide has occurred.

The Task Force on Youth Suicide believes that the Federal government should play an active role in monitoring the implementation of these recommendations and place a high priority on supporting data collection, research, services, and information dissemination.

Summary of the Recommendations

1. Develop accurate, timely, and valid data on suicide and attempted suicide.
We must develop uniform definitions for suicide and special programs (called "surveillance systems") at the State and local levels to identify and report suicides and suicide attempts more consistently, objectively, and completely. Standardized criteria for determining suicide as a cause of death should be implemented by death certifiers. These procedures may also provide the means to detect unusual patterns, or "clusters," of suicides and help to identify methods to prevent such suicides.

2. Conduct multidisciplinary research to determine and evaluate the risk factors for suicide.
It is important to identify the many psychological, sociological, and biological factors that contribute to an increased likelihood of suicide among youth. Well-planned, coordinated, and adequately funded efforts will help elucidate the causes of suicide, facilitate the identification of youth at greatest risk, and help in targeting intervention and preventive services for young people.

Because the risk factors for suicide are very diverse, we believe that suicide research can be enriched by interdisciplinary efforts that combine, for example, educators, biologists, sociologists, and psychiatrists in research projects.

3. Evaluate the effectiveness and cost of interventions to prevent suicide.
Little is known about the effectiveness of the

many suicide prevention and intervention programs that have been initiated since the 1970s. We need to know more about the kinds of interventions that work, for whom and under what circumstances they work.

We need to evaluate suicide prevention centers, telephone hotlines, school-based intervention and education programs, and peer support groups as well as programs targeted to specific groups. These include programs that enhance the ability of gatekeepers (people who are in frequent contact with youngsters) to recognize the warning signs of potentially suicidal youth and programs that improve early identification and treatment of depression by health care professionals. We also need to evaluate specific treatment modalities for suicide attempters, and programs that give emotional support to people who have survived another's suicide.

Because firearms are the most frequently used method for committing suicide, we must assess whether programs limiting access to this lethal means of suicide, especially to persons known to be at high risk, have an overall effect on suicide rates.

4. Support the delivery of suicide prevention services.

While the physical needs of young people who come to health care facilities are usually well attended to, other personal, school, or family problems that may place an adolescent at risk for suicide, are frequently not recognized by many health care providers.

Physicians, nurses, and others in health care settings, e.g., emergency rooms, general medical clinics, health maintenance organizations, prenatal clinics, should be alert about the risk factors for suicide among youth, have the ability to identify those in danger, and have the resources to refer them to appropriate mental health care. Emergency room personnel, for example, should refer adolescents for psychological evaluation when suicide attempts are suspected. In addition, more health care professionals are needed who specialize in psychological problems of youth.

Because its roots lie in many different social, health, and educational problems experienced by youth, suicide cannot be dealt with in isolation from other self-destructive behaviors. Suicide prevention activities should be integrated into broader health promotion programs and health care delivery services directed at preventing other self-destructive behaviors, such as alcohol and substance abuse, teen pregnancy, and interpersonal violence.

These improvements in services will require cooperation among health service, social service, and juvenile justice agencies. They will also require easing the legal and financial barriers that inhibit young people from obtaining appropriate health and mental health care.

Finally, technical assistance for communities in which suicides have occurred, should be made more widely available. State and local public health departments are the most appropriate agencies for providing assistance in developing response plans that will reduce the chances of further suicides in the community.

5. Inform and educate the public and health service providers about current knowledge in the prevention, diagnosis, and treatment of suicide among youth.

We must both promote public awareness of youth suicide and provide necessary training for health care professionals in suicide prevention. Developing special programs to improve the ability of gatekeepers to recognize clues to suicide, training school system personnel to assess suicidal risk in young people, and encouraging them to refer high risk youngsters to appropriate care are important aspects of suicide education. Moreover, we must make every effort to disseminate information on youthful suicide and suicide attempts to interested individuals and organizations through resource centers or information clearinghouses.

6. Involve both public and private sectors in the prevention of youth suicide. No simple, universally effective intervention will solve the problem of suicide. Preventing youth suicide will require the efforts of all sectors of the community--public and private--implemented at the national, State, and local levels.

Businesses should provide and encourage employees to use employee assistance programs when a family member is at risk for suicide. **Foundations and corporations** should increase their support for programs to prevent youth suicide. The **media and entertainment** industry should cooperate in efforts to investigate whether television and other media affect suicidal behavior of young people. **Youth services** should include primary prevention programs directed toward disadvantaged, socially isolated, and other underserved youth. **Religious** counselors should be aware of the indicators for suicidal risk and resources from which young people can get help. **Legal** means should be investigated for ways to limit access to means of suicide and ways to alleviate liability concerns of mental health professionals who treat suicidal youth.

The **criminal justice system** should educate personnel to recognize the high risk of suicide during periods of incarceration and provide mental health services for identifying and treating suicidal individuals. States should encourage **social services** in the public and private sector to develop comprehensive, preventive approaches for families with youth at high risk for suicide, substance abuse and interpersonal violence. Programs should be developed to strengthen **families** and enable them to support their youth through life crises.

The factors contributing to youth suicide are complex and defy simplistic solutions. These recommendations are not likely to be accomplished by short term efforts, but will require a variety of long term, ongoing, prevention activities and intervention approaches.

INTRODUCTION AND OVERVIEW

INTRODUCTION

The suicide of a young person is a personal tragedy, profoundly affecting a wide circle of family, friends, and acquaintances. The loss permeates an entire community which is often left feeling that somehow they have failed that youngster. Increasing suicide rates among our young have led to growing public concern over suicide and a pressing need to understand the kinds of problems and stresses that make young people choose suicide as a solution to their psychological pain. The nation demands to know why young people are killing themselves at unprecedented rates and what can be done to prevent these tragic events. After carefully reviewing the available information about suicide in the young, this task force concludes that:

- The state of knowledge about youth suicide is much less than that of many other health problems.
- Advancing the state of our knowledge about the causes of youth suicide and how to prevent it will require a carefully coordinated and sustained program of focused research and an organized multidisciplinary approach.
- The effectiveness of various intervention techniques designed to prevent youthful suicide need evaluation.
- An effective approach to suicide prevention will involve committed individuals in health, education, and social services within the public and private sectors.

MAGNITUDE OF THE PROBLEM

Suicide among young persons ages 15 to 24 have more than doubled between 1950 and 1980. Suicide now ranks as the second leading cause of death in this age group, accounting for 200,000 potential years of life lost each year. The fundamental change in suicide patterns since 1950 has critical implications for the public health priorities in the United States. Suicide has traditionally been considered a mental health problem of older white males. Its prevention focused on the detection and treatment of mental illness, most commonly depression. Beginning in 1980, however, more than half of all suicides occurred among persons under the age of 40.

Because of the dramatic rise in suicide rates among young persons, its increasing importance as a cause of premature death, and the changes in the patterns of suicide, suicide needs to be given high priority by the public health community in planning its future strategies. In fact, recognition of the large toll that suicide among youth exacts from our society was reflected in the objectives for the nation's health to be achieved by 1990. One of these objectives states, "By 1990, the rate of suicide among people 15-24 years of age should be below 11 per 100,000 (compared with 12.4 in 1978)." Figure 1 illustrates the trends in suicide rates since 1950.

The Secretary's Task Force on Youth Suicide was established in response to the urgent need to reexamine and advance our understanding of the causes of suicide, to

identify the people at greatest risk, to broaden research in new directions, and to implement interventions to prevent these deaths. Secretary of Health and Human Services, Dr. Otis R. Bowen, has affirmed his commitment to retaining the issue of youth suicide high on the Department's research and prevention agenda. The Task Force began its work in August 1985 and concluded in October 1987.

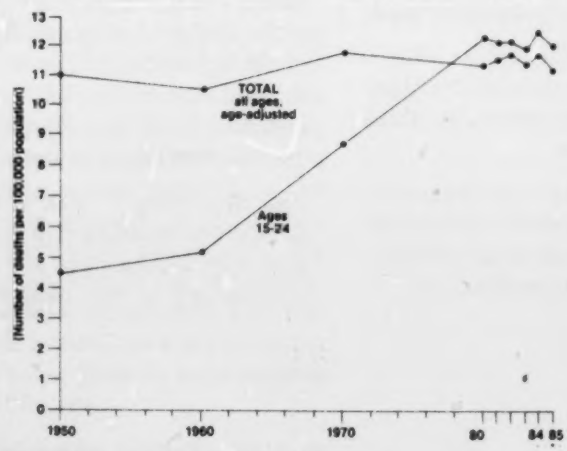
OVERVIEW

There is no one typical suicidal person. Each suicide is an individual act influenced by a diverse set of personal and social factors that often are not obvious. While hopelessness is a common characteristic of suicidal persons, each situation has its own history, setting and pathway. While each must be examined carefully on its own to find a possible explanation for the taking of one's own life, on deeper examination, patterns emerge which allow some generalizations to be drawn about young suicide victims.

We know that certain environmental, behavioral and biological characteristics, called risk factors, are associated with an increased likelihood of suicide in a population. Mental illness is often related to suicide. Only a portion of those who commit suicide, however, are known to have a diagnosable mental disorder. Other possible risk factors include the loss of a family member through suicide, broken families, emotional stress, a history of abuse and neglect, and drug and alcohol use. Many young suicide victims had a history of conduct disorders characterized by impulsive aggressive antisocial behavior often complicated by substance abuse. An estimated one third of all young people who commit suicide do not appear to fit the known picture--suicides occur in loving and supportive families as well as in disrupted families, among high achieving as well as low achieving students.

Research into suicide has concentrated primarily on the well-established relationship between suicide and psychiatric disorders in adults. Fewer studies focus on youth. It has not yet been established whether inferences drawn from adult research can be

Trends in Suicide Rates: United States, 1950-1985



While the overall suicide rate changed little since 1950, rates for young persons 15-24 increased.

*Provisional data

+More suicides than homicides occurred in these years.

Source: National Center for Health Statistics.

Figure 1.

applied to youth. For example, depression, a common antecedent to suicide in adults, may be less frequently associated with suicide in young people. Moreover, small sample sizes and lack of uniform research criteria for selecting subjects (e.g., age groupings) have hampered confirmatory research.

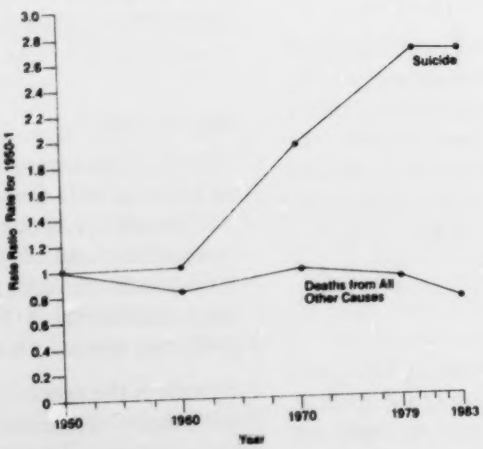
The most extensive network of prevention efforts to date are carried out by suicide prevention centers and crisis intervention units. Many of these centers, originally supported with Federal funding through the National Institute of Mental Health (NIMH), now operate with State and local support. Their services include 24-hour hotlines, counseling, referral, and group therapy for persons at risk, for their families, and for the "survivors" of the suicide. Educational programs addressing the topic of suicide have also been developed. Many programs not directly aimed at suicide prevention, such as school-based programs (designed to help children cope with stressful life events or enhance self esteem) or family counseling services for adolescents with behavioral problems, may have a potential, but yet unknown, preventive effect on suicide. The long term effectiveness, however, of most prevention services and educational efforts targeted to young people has not been fully evaluated. Despite the wide range of preventive intervention services available, suicide remains a confusing, elusive, and painful problem for professionals as well as laymen.

Supporting data

Almost 30,000 Americans take their own lives each year (28,620 in 1985). This number is greater than the annual number of homicides in the United States (19,420 in 1985). About 5,000 suicides occur among young people between the ages of 15 and 24. That means that each day, 13 Americans in this age group kill themselves. Many more young people attempt suicide and fail.

Suicide among young persons ages 15 to 24 has increased alarmingly since 1955. While suicide rates among the young are lower than those for older age groups (especially men over age 35), the rates for older persons have decreased during the past 30 years while suicide rates among young have increased. Figure 2 illustrates that while deaths from all

Trends in Death Rates from Suicide and All Other Causes Compared to 1950 for Persons Aged 15-24



While deaths from all other causes decreased in the United States since 1950, suicide rates for young people increased.
Source: National Center for Health Statistics
Figures represent rate relative to 1950 in percent.

Figure 2.

other causes of death in the United States declined for 15 to 24 year olds, the suicide rate for this age group has steadily climbed upwards. In 1950, the suicide rate for young people 15 to 24 years old was 4.5 per 100,000 population. By 1979, the rate has risen to 12.4 (5,246 suicides), exceeding for the first time the rate for all ages combined. In 1985, the number of suicides dropped to 4,760 or a rate of 12.0 per 100,000 youngsters in this age group.

The reasons for the slow decline since 1979 are unknown, but some observers postulate that when a segment of the population increases, the incidence of adverse events within that group also increases (e.g., homicides, drug use, suicides). The proportion of adolescents in the total population peaked in the late 1970s, possibly engendering a level of stress--crowded schools, fewer job opportunities, fewer chances for success-which the population was ill prepared to handle. As the proportion of adolescents decreased, declines in homicides, adolescent drug use, and suicides were recorded. An increase in the number of adolescents is projected for the late 1990s. With better understanding of the causes and prevention of suicide, helping professionals should be well prepared to take decisive action in the ensuing years to preclude any further increase in youthful suicide.

For many years suicide had been the third leading cause of death among young Americans 15 to 24 years old. Only accidents and homicides claimed more victims. In 1984, because of the decline in the homicide rate, the number of youthful suicides exceeded the number of homicides. This represents the first time that suicide is the second leading cause of death for this age group.

Experts postulate that some additional deaths (such as some poisonings, single car crashes, or homicides) may actually be misclassified suicides. Many medical examiners and coroners (the persons who generally determine whether a death is classified a suicide) believe that the reported number of suicides may be less than one half the true number. Another index by which to measure the impact of a particular cause of death is the number of years of potential life lost because of premature death. Violent deaths among young people, including suicides, homicides, and accidents, are the leading cause of potential years of life lost in the United States.

Suicide in the young is more common among males than females by a ratio of approximately 5:1. Seventy percent of all suicides were committed by white males in 1980. The most common methods for suicide are by firearms, hanging, and poisoning with a drug overdose. The western States have the highest adolescent suicide rates; the northeastern States have the lowest rates.

A substantial number of youngsters deliberately harm themselves in suicide attempts. Their annual number is very difficult to ascertain. Injuries or drug overdoses occurring in youngsters are frequently not reported or investigated as suicide attempts by the emergency personnel who attend them. Various studies estimate that attempts are 5 to 20 times greater than completed suicides; between 1 and 10 percent of all persons who attempt suicide go on to commit suicide. The relationship between those who attempt and complete suicide is discussed in commissioned papers included in other volumes of this report.

Minorities

Suicide rates among blacks are roughly half as great as those among whites for both men and women, although black male suicides outnumber females by about 4:1. The rate of suicide in black males ages 15 to 24 increased from 4.9/100,000 in 1950 to a peak of 12.3 in 1980; the rate stands at 11.2 in 1984.

Suicide is the second leading cause of death (following accidents) for young Native Americans. The average suicide rate reported by the Indian Health Service for 1981-1983 was 27.9 for 15 to 24 year old Native Americans compared to an average rate

of 12.2 for all Americans 15 to 24 years old during the same time period. Suicide rates vary considerably among individual tribes and one must be cautious about using aggregate data to generalize about Native American suicides. The age distribution pattern of suicides among Native Americans differs from that of the general population in that Native American suicide victims are generally younger, peaking at ages 20 to 24.

Suicide data on Hispanic youth were obtained from five southwestern States where more than 60 percent of all Hispanics in the United States reside. The suicide rate for Hispanics is lower than the rate for non-Hispanic whites but higher than rates for blacks in the same geographic area. Contrary to the patterns observed among non-Hispanic whites in which the suicide rate increases with age, the highest suicide rates for Hispanics occur in the 20 to 24 year age group.

Very few studies have concentrated on suicide among Asian American youth. Available information indicates that Chinese, Japanese, and Filipino male suicide rates are generally lower than those of American males except in the oldest age groups. Data on minority groups are presented in Volume 3 of this report.

TASK FORCE ORGANIZATION

Charge

In response to the high rates of suicide among America's young people, a departmentwide Task Force on Youth Suicide was established in May 1985 by former Secretary of Health and Human Services Margaret Heckler. Secretary Otis R. Bowen continued the Department's support of this project. The task force was charged to:

- Coordinate activities relating to suicide among the various Federal agencies, Congress, State and local governments, private agencies, and professional organizations.
- Assess and consolidate current information on suicide in the age group 15-24.
- Provide a forum for communication among health care providers, educators, social service professionals, and families.
- Recommend and initiate strategies for addressing the problem.

Shervert H. Frazier, M.D., Director of the National Institute of Mental Health, was appointed as chairman of the task force. Other members of the task force--administrators, policymakers, and scientists in DHHS--represent every arm of the Department. These individuals are not only committed to finding solutions to the problems of suicide, but have the authority within their respective agencies to implement the recommendations generated by the task force. The strategy developed by this distinguished group includes:

- Coordinating Federal activities in the area of youth suicide research, education, and service programs.
- Integrating activities with State and local jurisdictions.
- Promoting opportunities for cooperation and collaboration with other diverse interests in the area of youth suicide including community, professional, and public advocacy groups.
- Establishing a flexible framework for setting priorities in health and human services directed toward youth.

The task force acknowledges, however, that the success of any suicide prevention effort will depend on the ability of government to work with key individuals and programs in the private sector and on the ability of these programs to affect the lives of individuals and families. Ultimately, success hinges on the dedication and involvement of individuals, families, social and civic organizations, and citizen volunteers working with young people in local communities.

Work Groups

Work groups were organized around three major topics defined by the task force:

- Risk factors for youth suicide
- Prevention and interventions in youth suicide
- Strategies for the future

Each work group was composed of experts from within and outside the government and included researchers, clinicians, service providers, educators, and national and local authorities. The work groups examined the complex nature of suicide and reviewed past and current research and prevention programs.

The Work Group on Risk Factors was chaired by Dr. Lucy Davidson of the Centers for Disease Control (CDC) and Dr. Markku Linnoila of the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The work group identified a comprehensive list of characteristics linked to suicide and grouped them into 14 categories. Experts in each area were commissioned to analyze and summarize the current scientific literature in their area. The resulting papers, which appear in Volume 2, reviewed the role of environmental, behavioral, sociocultural, biologic, and psychological factors that have been associated with an increased likelihood of suicide among young people. Knowledge of these characteristics (or risk factors) is important in clarifying the causes of suicide and is vital in planning and instituting early prevention measures, and in identifying high-risk groups to whom preventive or educational interventions can be targeted.

The Work Group on Prevention and Interventions was cochaired by Dr. Jack Durell of the National Institute on Drug Abuse (NIDA) and Commissioner Dodie Livingston of the Administration for Children, Youth, and Families (ACYF). On Dr. Durell's retirement, Dr. Dorynne Czechowicz of NIDA was appointed as cochairperson. The work group examined currently operating prevention programs and various intervention techniques. The work group selected experts to review the literature, describe various programs and, if possible, evaluate the effectiveness of modalities of preventive interventions. Topics included primary prevention methods, community responses to suicide, networks for suicide prevention, interventions for special populations such as minorities and drug/alcohol users, issues related to early detection and treatment, and reports from federally supported research and demonstration centers.

The Work Group on Strategies for the Future, chaired by Dr. Mark Rosenberg of CDC, channelled the findings of the work groups and conferences into a feasible, cohesive plan to address the issues defined by the work groups. They studied a wide array of recommendations submitted by the members of the three work groups, by authors of commissioned papers, and by the participants in the national conferences. The recommendations were organized into 10 categories, then reviewed and synthesized by the task force into their final format. The strategy that emerged focused on a program of targeted research, support for and evaluation of preventive services, and public information and education.

The work group's commissioned papers explored broad policy issues in suicide prevention, such as the role of the Federal government, the economic impact of suicides, estimating the effectiveness of preventive interventions, the prevalence of suicide attempts, the role of education, the impact of the media, and the roles of health services, business, and philanthropy.

Commissioned papers

The work groups commissioned approximately 50 scientific papers and studies. The authors reviewed the scientific literature and discussed the current state of knowledge in their respective topics. Each author proposed recommendations suitable to

his/her area of expertise. Many of these papers were presented at the national conferences, and most appear in subsequent volumes of this report.

National conferences

Each work group sponsored a national conference. The National Conference on Risk Factors for Youth Suicide focused on etiological factors that might lead to suicide: the psychosocial, emotional, and possible biological roots of suicide among youth. The National Conference on Prevention and Interventions in Youth Suicide addressed issues relating to primary and secondary prevention, responses to suicide prevention from the Federal to the community level, early detection and treatment programs, school-based programs, and the services of volunteer organizations. The National Conference on Strategies for the Prevention of Youth Suicide presented the preliminary recommendations of the task force. Plans for implementation of the recommendations were drafted by representatives of the organizations that ultimately will be involved in their implementation and opportunities for achieving change were discussed.

The first two conferences included review panels that critiqued each series of presentations. Frequent open discussion and comments expanded the value of the conferences.

One of the great strengths of the national conferences was that people from a broad range of disciplines were able to meet and exchange views. Conference participants included professionals in the fields of mental health, biological research, education, social and behavioral sciences as well as community leaders, theologians, State, local, and national government officials, representatives of advocacy groups, leaders of volunteer groups, and family members. Participants represented the many sectors whose involvement and commitment are necessary in the effort to reduce and prevent suicide.

Inventory

An inventory of DHHS research, service delivery, and education programs relating to suicide was compiled by the task force. It includes an index listing agencies, program titles, offices responsible for program administration, and brief descriptions of each program. NIMH, a component of the Alcohol, Drug Abuse, and Mental Health Administration, is the principal conduit for federally supported basic research in suicide, while ACYF supports seven programs for runaway youth which have specific suicide prevention components. CDC offers technical assistance to State and local health departments and communities where suicides have occurred and serves as the locus for gathering and analyzing data related to suicide. CDC also works to improve the identification and reporting of suicides and suicide attempts, and supports applied suicide research through its injury prevention grant program. Some programs listed in the inventory do not relate directly to suicide, but emphasize general health promotion issues that may be applied to suicide prevention. For example, Head Start programs for young disadvantaged children emphasize social skills that contribute to enhancing self esteem. Similarly, alcohol and drug abuse prevention programs which indirectly relate to suicide are supported by NIDA and NIAAA.

CONTEXT FOR THE TASK FORCE RECOMMENDATIONS

The task force wished to involve citizens as well as public and private organizations interested in suicide in its deliberations and obtain these groups' best thinking on the problem. Therefore, all participants attending the national conferences and all authors of commissioned papers were invited to submit recommendations relevant to their work or field of study. More than 200 persons submitted recommendations to the task force. These were reviewed by the Work Group on Strategies for the Future and integrated into the task force recommendations.

The final recommendations developed by the task force evolved from a large pool of proposed items in twelve areas: public health, health services, mental health, education, legal and political changes, criminal justice, family and social services, religion, business, philanthropy, media/entertainment, and youth activities. The recommendations, which include activities in research, education, and services, are accompanied by supporting statements underscoring their importance and suggestions of groups that can aid in their implementation. Many of these statements reflect views expressed in the commissioned papers (listed in the appendix of this volume). The recommendations are organized into six major categories:

- Data Development
- Research into Risk Factors for Youth Suicide
- Evaluation of Interventions to Prevent Youth Suicide
- Suicide Prevention Services
- Public Information and Education
- Broader Approaches to Preventing Youth Suicide

The task force acknowledges that the factors contributing to the deplorable rates of youth suicide are complex and defy simplistic answers. The development and evaluation of suicide prevention alternatives is not likely to be accomplished in a few short term efforts. The effort to reduce suicide will require an ongoing, long term strategy that supports data collection, research, education, delivery of health and social services, and encourages continuous communication with community organizations.

Furthermore, prevention and intervention in suicide cannot belong to one academic discipline or professional specialty. Interventions must integrate the diverse interests in the field, public and private, and involve a wide variety of support systems including those within the family structure, school, and religious and social environment of young people.

RECOMMENDATIONS OF THE TASK FORCE

Recommendation 1:

DATA DEVELOPMENT

Develop accurate, timely, and valid data on suicide and attempted suicide.

a. **Uniform Criteria for Suicide**

b. **Community-based Surveillance Systems for Suicide Attempts**

c. **Unusual Suicide Patterns**

INTRODUCTION

Suicide is an important public health problem in the United States today. It is the second leading cause of death among young persons 15 to 24 years of age, yet the public health data base for suicide is limited in accuracy and reliability.

Reliable data are essential for measuring progress in public health. Data are the key to pointing out needs, measuring trends, serving as a basis for appropriate clinical and community intervention, recognizing sources and solutions to problems, and determining program effectiveness. The task force believes that obtaining better statistical data on suicides and suicide attempts, especially by persons between ages 15 and 24, is an area of major importance that needs improvement.

UNIFORM CRITERIA FOR SUICIDE

RECOMMENDATION 1a.

Improve the quality of suicide data by promoting uniform criteria for the determination of suicide and a uniform approach to suicide surveillance.

Suicide is universally considered to be underreported as a cause of death in vital statistics. The reported number of suicides may represent only 50 to 85 percent of the true number. In the United States, decisions about classifying deaths as suicides on death certificates are usually made by a coroner or medical examiner. These decisions, however, are frequently marked by a lack of consistency and clarity chiefly because there are no commonly accepted, uniform criteria to guide the judgments of these officials. Laws and procedures for determining whether a death is classified a suicide vary from State to State, and even from county to county.

Many factors contribute to underreporting: officials, even in neighboring jurisdictions, often use very different criteria to determine whether a death is a suicide. For example, some coroners may require a signed suicide note from the victim; others may make this determination based on evidence from an autopsy and interviews with the decedent's family. Personal biases, practical considerations (such as the loss of insurance benefits), incomplete information, and pressure from the family and community (because of the social stigma associated with suicide) also contribute to the underreporting of suicide. Problems with determining ethnicity of a decedent may cause underreporting of

deaths in minority groups.

Criteria for reporting suicides

The unknown degree to which suicide is underreported or misclassified makes it impossible to estimate accurately the actual number of deaths by suicide, to identify risk factors, to plan or evaluate preventive interventions, or to measure progress in preventing suicide.

Developing uniform criteria for the determination of suicide would improve the validity and reliability of suicide statistics by:

- Promoting a consistent and uniform process for deciding whether suicide was the cause of death,
- Making this decision process explicit,
- Increasing the amount of information used in decision making, and
- Aiding certifiers in exercising their professional judgment.

In addition, the design and evaluation of preventive services requires valid and reliable epidemiological data collected at the community and local level. Surveillance systems--special programs to identify and report suicides more uniformly, objectively, and completely--should be developed at State and local levels. This recommendation is of high priority because accurate data are crucial to research, services, program planning and evaluation, and public education.

Action Plan

To enhance the opportunities for improved data collection relating to suicide, the following activities should be pursued. Many organizations within and outside government should participate in these efforts.

- Develop education and training programs in the determination and reporting of suicide for coroners, medical examiners, forensic pathologists, and other State public health officials. Strengthen and expand efforts to complete vital statistics records accurately--particularly in regard to correct coding of causes of death.

  Suitable education programs can be promoted by groups such as the Centers for Disease Control (CDC), the Indian Health Service (IHS), the National Center for Health Statistics (NCHS) which was merged with CDC in 1987, State departments of health, and the Association of State and Territorial Health Officers (ASTHO).

- Encourage the regular use of behavioral sciences consultation in the investigation of all youth deaths. Medical examiners' offices should undertake this activity with the support of AAS.

- Secure Federal endorsement and encouragement for the distribution of uniform operational criteria for the determination of suicide. Assess the validity and utility of these criteria. The Departments of Health and Human Services (DHHS), Justice, and Defense, and the IHS should work toward these goals in collaboration with the Working Group on the Determination of Suicide.*

- Develop instructional materials for communities and States to use as guidelines in setting up suicide surveillance programs.

- Develop an awareness among civic leaders, mental health professionals, educators, and the public, that public health officials can play a key part in the prevention of youth suicide, a role not traditionally considered to be in the domain of public health. CDC and ASTHO should work to attain this objective.

* The Working Group on the Determination of Suicide is made up of individuals from the American Academy of Forensic Science, American Association of Suicidology (AAS), Association for Vital Records and Health Statistics, CDC, International Association of Coroners and Medical Examiners, the National Association of Counties, National Association of Medical Examiners, and NCHS.

Progress Indicators

The completion of the following goals will serve as a measure of progress in improving data collection:

- Adoption of uniform operational criteria for the determination of suicide by all States and local jurisdictions.
- Implementation of suicide reporting procedures that are uniform, consistent, valid, dependable, and accurate.

COMMUNITY-BASED SURVEILLANCE SYSTEMS FOR SUICIDE ATTEMPTS

RECOMMENDATION 1b.

Develop community-based surveillance systems for suicide attempts, based on consistent operational definitions of suicide attempts and suicidal behaviors.

Information about suicide **attempts** is very sketchy and incomplete. It is estimated that for each completed suicide, there are eight to twenty attempts at suicide. Although some suicide attempters go on to become suicide completers, there are some striking differences between the overall groups of suicide attempters and completers. For example, female suicide attempters outnumber males (by as much as three to one in some studies) while the sex ratio is reversed for those who complete suicide. Suicide attempters are somewhat younger, on the average, than those who complete suicide. Because approximately one out of ten persons who attempt suicide eventually goes on to complete suicide, suicide attempters clearly represent a high risk group to whom preventive interventions should be targeted.

A clear and consistently applied set of terms is needed to facilitate the identification and reporting of suicidal ideation and behavior and suicide attempts.

More information is needed on the characteristics of young people who attempt suicide. These may include underlying health problems such as child or spouse abuse, history of alcohol or drug abuse, history of mental illness, family history of mental illness or suicides, family structure, and socioeconomic status.

A community-based suicide attempt surveillance system would provide local health officials with information to:

- Determine the scope of attempted suicides in a given community.
- Characterize epidemiologically those who attempt suicide so that high risk groups can be identified and specific prevention/intervention strategies formulated.
- Identify specific individuals whose high risk for subsequent suicide should make them targets for mental health or social services. At the same time efforts need to be made to protect the confidentiality of clients for all mental health and social services.
- Characterize the resources needed to respond to this problem.
- Evaluate suicide prevention efforts.
- Identify suicide attempt clusters quickly.
- Establish whether one or more suicides in a community are preceded or followed by an increase in the number of suicide attempts.
- Describe the morbidity and social costs associated with suicide attempts.

Action Plan

The following steps are needed to achieve better definition of suicide attempts, a better system to identify and track suicide attempters, and better cooperation among community health and social service organizations in identifying youth at risk for suicide.

- Develop consensus around operational definitions of suicide attempts, and suicidal ideation and behaviors. (See action plan for Recommendation 2a.)
- Support and encourage community feasibility studies of suicide attempt surveillance systems. CDC, IHS, and ASTHO are good resources for developing these studies.
- Encourage pilot intervention programs for identified suicide attempters. State and local health organizations should collaborate in developing such programs.
- Review existing protocols and procedures for identifying, referring, and treating suicide attempters. The National Institute of Mental Health (NIMH), and CDC should be involved in this activity.

UNUSUAL SUICIDE PATTERNS

RECOMMENDATION 1C.

Conduct special investigations of suicide and attempted suicide that appear to be clustered, epidemic, or have unusual patterns of occurrence.

Suicide clusters are suicides that occur in a particular area, such as a community or a school district, within a relatively short time of each other. Suicide clusters have been known to occur for many years, and have been suspected in many areas of the United States. Unlike communicable diseases, however, apparent suicide clusters or other unusual aspects of youth suicide are not reportable to public health authorities, so we do not know how frequently they occur, what proportion of all youth suicides might occur in clusters, or whether the frequency of suicide clusters has increased in recent years.

We stand to learn a good deal from investigating unusual patterns of suicide--areas in which marked increases in the suicide rate appear to occur, when unusual methods are employed, or when suicide clusters appear.

Developing and maintaining an early warning surveillance system to monitor outbreaks of suicidal behavior in communities is important to prevent the spread of suicides by imitation or "contagion." Recommendation 2c discusses research into suicide clusters and suicide contagion more fully.

Action Plan

The following activities will aid in developing a surveillance system to detect unusual suicide patterns.

- Encourage awareness by the mental health sector, educators, civic leaders, and the public, that public health officials are an appropriate resource for community-level investigations into youth suicides and interventions to prevent suicides. CDC, ASTHO, and school system personnel should work toward developing this awareness.
- Identify resources for State and community level interventions to prevent suicide clusters after a possible index case has been identified. NIMH, CDC, State and local health and mental health personnel, and education professionals should develop guidelines for States and communities to use in preventing youth suicide and in implementing "suicide cluster response plans" when an increase in suicides occurs.

Progress Indicators

Progress in establishing national, State, and community-level suicide surveillance systems can be measured by the increase in the number of communities which develop response plans to youth suicide, and the degree to which public health authorities become involved in community-level investigations and interventions associated with suicide clusters.

RECOMMENDATION 2: RESEARCH INTO RISK FACTORS FOR YOUTH SUICIDE

Conduct multidisciplinary research to determine and evaluate the risk factors for suicide.

a. **Risk factors suggested by surveillance data and bio- behavioral factors.**

b. **Antecedent risk factors.**

c. **Suicide clusters and contagion.**

INTRODUCTION

The causes of suicide, for even a single individual, are multiple and complex. One promising scientific approach to understanding and preventing suicide is through the identification of risk factors, or characteristics of individuals that are associated with an increased risk of suicide. Each suicide has its own unique set of circumstances-- history, reasons, setting, method. On careful examination of larger numbers of suicides, however, patterns emerge which allow scientists to draw some general conclusions about the conditions which place some young people at higher risk. If those young people at highest risk can be identified, preventive services can be provided to them and, it is hoped, their suicides prevented.

In addition, identifying the behavioral, sociocultural, biological, and psychological factors that contribute to an increased likelihood of suicide among young people will help to elucidate causes of suicide, help to identify subgroups at particularly high risk, and help to develop and evaluate effective intervention strategies. This research effort is most likely to be successful if it is carefully planned, well coordinated, adequately funded, and effectively administered through the Federal public health and mental health agencies already in place.

CHARACTERISTICS LINKED TO YOUTH SUICIDE

RECOMMENDATION 2a.

Refine our current knowledge about risk factors by investigating potential risk factors suggested by surveillance data and by biological and behavioral studies.

The disorders which lead to suicide are understood only in the vaguest of terms. While research reports reviewed by the task force varied in quality and methodology, sufficient data are available to establish a number of biochemical, behavioral and social characteristics linked to youth suicide. The list is long and diverse. It includes:

- Substance abuse (by the youngster or a family member).
- Mental illness: affective disorders,

schizophrenia, and borderline personality disorders.

- A history of previous suicidal behavior.
- Impulsive, aggressive, and antisocial behavior.
- Severe stress in school or social life; disciplinary crisis.
- Family influences: a history of violence in the family, familial genetic traits such as predisposition to affective illness, parental loss and family disruption, suicidal behavior among parents and relatives.
- Low concentrations of the serotonin metabolite, 5-hydroxyindoleacetic acid (5-HIAA), and homovanillic acid (HVA) in the cerebrospinal fluid.
- Homosexuality.
- Being a friend of a suicide victim.
- Rapid sociocultural change.
- Media emphasis on suicide.
- Ready access to lethal methods, such as firearms, carbon monoxide poisoning, or drugs.

In some individuals, the simultaneous presence of more than one disorder or problem (comorbidity) may combine to increase suicidal risk. For example, antisocial behavior and depressive symptoms appear to be a particularly lethal combination.

Research Requirements

For the most part, identifying risk factors and following trends in risk patterns can be accomplished by well-designed epidemiologic studies. To determine whether a presumed risk factor for suicide is a true causal factor or only a secondary effect of another risk factor will often require population-based, longitudinal studies.

Because risk factors for suicide are numerous and interrelated, it is important to determine their relative importance and independence. It is also important to differentiate between antecedent conditions that may predict future suicidal behavior and precipitating factors. For example, breakup of a relationship is the number one traumatic event (precipitating factor) triggering suicide for both sexes, but it is usually the last straw for troubled youngsters with other antecedent conditions.

More research needs to be conducted with young people. Until the present time, most suicide research focused on adults. Attempts to extrapolate the results to youthful populations have not been demonstrated to be valid. Efforts should be made to replicate the better designed adult studies for youth to establish whether inferences drawn from adult research are applicable to youth.

Similarly, persons who attempt suicide have many traits in common with those who complete suicide, but information derived from one group may not accurately describe the other. To produce meaningful and valid conclusions, studies comparing these groups should have adequate numbers of appropriately chosen control groups, and adequate sample sizes.

Action Plan

The suggestions presented here by no means exhaust the range of activities needed for further research into the underlying reasons for suicide among young people. The papers commissioned by the workgroup on risk factors provide a more elaborate background for many of the recommended research activities.

- **Broaden the field of suicide research and encourage studies that combine biological and psychosocial approaches to identification of risk factors.**

Too often research is divided into separate disciplines, but we know that the problems contributing to suicide are very diverse. Educators, psychiatrists, epidemiologists, sociologists, biologists, and theologians can enrich our under-

standing of youth suicide through interdisciplinary research.

One way to bring more excellent investigators into the field of youth suicide research is to hold a workshop for scientists who either possess the necessary skills but who have no current interest in youth suicide research, or who are working in a related area, such as substance abuse, but do not include suicide as a specific outcome under study.

- **Promote uniform definitions and research methods. Develop standardized criteria and definitions for suicide research.**

  To increase comparability among different studies, research scientists should use standard terminology and uniform research methods. Standardized criteria and definitions need to be developed and universally applied, especially for such terms as suicide, suicide attempts, and suicidal ideation. This practice can be encouraged by agencies that fund research and by the journals that publish research results.

  A meeting of interested research groups could decide on definitions, test them in the field, and empirically determine their validity and usefulness.

  Research techniques should include case-control studies, population-based studies, and surveys. Analyzing existing data sets or studies that were originally intended for other purposes, for suicide-related data ("piggy-back" studies) should be encouraged.

- **Demonstrate the impact and utility of psychological autopsies.**

  Understanding the psychological state of the suicide victim is critical to understanding the reasons for the suicide, but in all cases, the key informant is no longer available for questioning. For this reason, the psychological autopsy is an important research technique. It involves interviews with persons close to the suicide victim in an attempt to reconstruct the lifestyle, symptoms, and personal behavior of the victim during the critical period before the suicide. This information can help to identify conditions or warning signs predictive of other suicides.

  Because the respondents to this type of interview often express anxieties, questions on suicide have, at times, been omitted from other systematic death surveys. We need to evaluate the impact of psychological autopsies on survivors, either to reassure those who have concerns, or, if evaluation demonstrated negative effects, to modify the approach to lessen the negative effects.

- **Develop instruments for epidemiologic surveys.**

  Epidemiologic studies on adolescent behavior in various geographic areas of the United States should be conducted. To do so, a questionnaire should be developed that uses a short, clear, multiple choice format that does not require a psychiatrist to administer. The questionnaire format should be widely disseminated so that similar data from different areas can be combined and compared.

  An example of how such a survey instrument might be applied is to undertake a study of adolescent residents of a particular area who have never been referred for psychological consultation. Such a study is likely to clarify many uncertainties about the significance of various suicide-related behaviors.

- **Encourage government funded research into suicide risk factors.**

  Through their granting mechanisms, Federal agencies are the most appropriate institutions to sponsor risk factor research. The research should focus on a carefully planned set of program components. To emphasize its requirements for a systematic, logical approach, Federal government research agencies

should provide a review of information on risk factors, methodological requirements, and a common set of terminologies and criteria to potential investigators.

The research proposals should be reviewed by a multi- disciplinary, ad hoc committee representing the method and topic areas relevant to youth suicide research. Multi-centered cooperative research programs should be encouraged to allow studies to have adequate numbers of cases and controls. CDC and NIMH are the most appropriate government agencies for sponsoring this kind of research.

- **Seek to increase privately funded research.**

  The urgent need for appropriate research should be brought to the attention of private foundations by professional organizations or by those foundations which serve important coordinating functions, such as the Carnegie Foundation. The topic areas for privately funded research should be similar to those for government-funded research.

Progress Indicators

Progress toward implementation of the recommendations for research into risk factors can be measured by improvement in the following indicators.

- The amount of resources devoted to risk factor research, not only in funds, but in manpower devoted to this end.
- The availability of large suicide data sets with detailed information about the prevalence of various risk factors in different risk groups.
- The number of studies which have a primary focus in other areas, but collect and report data related to suicide.
- The number of studies which use epidemiologic analyses to examine the relationships of biological variables with other risk factors for suicide, including psychosocial and behavioral parameters.
- The number of secondary or "piggy-back" studies being done on data sets or samples originally studied for other purposes.

RISK FACTOR PREVENTION

RECOMMENDATION 2b.

Conduct research into interventions focused on preventing antecedent risk factors or conditions associated with suicide among the young, such as depression, substance abuse, antisocial behavior, and delinquency.

One way to prevent suicide is to prevent or ameliorate the conditions which may lead to suicide. Research into many of those psychological and behavioral conditions such as depression, drug abuse, alcoholism, aggression, and antisocial behaviors, is already underway, but much of this psychologically based research has not directly been related to suicide. Investigators in these areas should be encouraged to assess the impact of these conditions on suicide. Findings derived from these lines of research can suggest important preventive interventions for suicide.

Action Plan

These activities should be supported by governmental and private funding agencies.

- **Identify investigators who do research on conditions related to suicide (such as drug abuse, juvenile delinquency, family breakup), but are not relating their research to suicide. Circulate information to these investigators which links the conditions they are studying to suicide so that their work may contribute to the suicide prevention effort.**

  There is a wealth of epidemiological, biological and psychological data from

large scale research endeavors such as the NIMH Depression Collaboration Study and the NIMH Epidemiologic Catchment Area study. Data are also available from studies on AIDS populations. If information from these studies were analyzed for their relationship to suicide, we might learn more about the etiology of suicidal behavior, about possible sequencing of events over time for individuals at risk, and about comorbidity issues associated with suicidal behavior. (Comorbidity refers to two or more psychological or medical conditions whose simultaneous presence combine to exacerbate suicidal risk.)

- **Provide supplementary funding to investigators who are able to broaden their research to studying its impact on suicide.**

Progress Indicators

Anticipated indicators of progress toward implementation of these activities are: an increase in suicide prevention research projects and wider knowledge of the impact of preventive interventions on conditions associated with suicidal behaviors.

SUICIDE CLUSTERS: RESEARCH

RECOMMENDATION 2c.

Conduct research on suicide clusters and the mechanisms of imitation and contagion in suicide.

Suicide clusters, as discussed previously, are suicides that are grouped together in a particular place **and** occur within a relatively short period of time. Recommendation 1c calls for establishing a reporting system to enable public health officials to detect a cluster or other unusual aspects of suicide. Here, we wish to investigate the mechanisms by which suicide clusters occur.

One explanation for cluster suicides is the "contagion" theory: the idea that suicide spreads among young people who are "exposed" either directly or indirectly to suicide. Direct exposure occurs if a friend or a classmate commits suicide; indirect exposure to suicide occurs through news reports, books, movies, or discussions. Although our understanding of suicide contagion is incomplete, some research evidence suggests that indirect exposure to suicide through print or broadcast media might lead some **susceptible** individuals to commit suicide. (Not all youngsters, however, are equally susceptible.) Many people believe that either direct or indirect exposure may lead susceptible youths who identify with, or feel themselves to be similar to the initial suicide, to imitate the initial suicide by choosing a similar method or setting. If imitation can be shown to occur, it can be expected to have an impact on the design and implementation of a variety of suicide prevention measures. A key area for research is how best to identify the most susceptible young people.

For effective suicide prevention, we need to have a deeper understanding of the nature of suicide cluster outbreaks. More specifically, we need to:

- develop methods for identifying suicide clusters;
- know more about the characteristics of the participants and the circumstances that initiate a suicide cluster in contrast with sporadic cases of youth suicide which may not be associated with other cases; and
- identify and understand in detail the psychological mechanisms which may promote or discourage imitation.

This should be given high priority because a better understanding of the clustering phenomenon may suggest specific interventions for suicides which may turn out to be more preventable than other suicides.

Action Plan

- **Broaden the field of suicide research.**

Bring more social, psychological, and developmental scientists into the field of suicide research. One way to raise interest in this field is to hold a workshop for researchers who have the necessary skills but no current interest in imitative suicides, or who are working in a related area, such as imitation of other forms of violent behavior or media psychology and who do not include suicide as a variable under study. In addition, joint efforts by media organizations and governmental research bodies would be appropriate.

- **Fund suicide cluster research through government and private agencies.**

This research is most appropriately supported through NIMH and CDC by direct solicitation of multidisciplinary proposals. These solicitations or program announcements should be accompanied by a review of information on clustering and imitation and be reviewed by a multidisciplinary ad hoc committee representing the method and topic areas relevant to youth suicide imitation research.

Progress Indicators

Indications of progress in the achievement of these activities include:

- better data on the frequency, extent, timing, and other characteristics of suicide clusters.
- modified media handling of suicides that reflects an improved understanding of the mechanism of contagion. We do not yet know the effects of media coverage on subsequent youth suicides, nor do we know enough to establish clear-cut guidelines for media coverage of suicide. Until we do, prudence would suggest that coverage of suicides be accurate in presenting information to the public.
- reduction in the number of suicide clusters reported each year.
- reduction in the number of deaths attributable to clusters.

Recommendation 3:

EVALUATION OF INTERVENTIONS TO PREVENT YOUTH SUICIDE

Evaluate the effectiveness and cost of interventions to prevent suicide.

a. Interventions addressed to the general population

b. Interventions addressed to specific populations

c. Interventions to limit access of youth to lethal means of suicide.

INTRODUCTION

One of the most troublesome aspects for planners in the area of youth suicide prevention is the lack of substantial and convincing data about the efficacy of existing programs. Unfortunately, little research has been conducted on the comparative effectiveness of different interventions to prevent youth suicide. Nonetheless, at the present time, we must rely on the subjective judgments of experts in various aspects of suicide.

Evaluation research is made difficult by many factors; for example:

- the mobility of the young population.
- the lack of accurate reporting of suicide deaths.
- the lack of comparable methodologies employed in some studies.
- the inability to measure delayed effects of a program.
- the difficulty of following up anonymous hotline callers, especially those who may be mentally disturbed.
- the difficulty of measuring suicide reduction as an outcome of programs which are not directly related to suicide prevention.
- the ethical dilemma encountered when specific intervention programs are compared to a "control" population at equal risk, which does not receive the intervention. Withholding effective interventions from groups at risk cannot be sanctioned.
- the difficulty of isolating the effects of prevention programs from other variables that may influence a potential suicide. Before proceeding with large-scale costly efforts, the potential benefits of these programs need to be tested and evaluated on a smaller demonstration level.
- the rarity of suicide, making it necessary to study huge numbers of youth.

In this section, the discussion is based on the premise that to prevent suicides among young people, three general conditions must be met: first, the youth must be identified as potentially suicidal; second, the identified youth must be offered and accept a treatment; third, the treatment must be successful.

INTERVENTIONS ADDRESSED TO THE GENERAL POPULATION

RECOMMENDATION 3a.

Evaluate the effectiveness of interventions to prevent youth suicide that are directed at the general population, including suicide prevention centers and school-based programs.

Suicide prevention centers and school-based educational programs are examples of major preventive interventions targeted to the general population. Their overall purpose is to increase the likelihood of identifying potentially suicidal youth and persuading the youth to enter a treatment program.

Suicide prevention centers

The most well-known suicide prevention efforts in the United States are suicide prevention centers, telephone hotlines, and crisis intervention units, set up to respond to people who are lonely, depressed, or suicidal. These programs differ widely in size and structure, in the services they offer, and the populations they serve. Of the approximately 1,000 programs operating in the United States today, about 200 are specifically called suicide prevention centers. Most of the program names, however,--crisis center, telephone hotline--reflect a broader, crisis intervention purpose than suicide prevention alone. Most offer crisis care for all ages but with the increasing importance of youth suicide, some programs, but not the majority, have components specifically directed at children and adolescents.

Almost all centers include telephone hotlines that take calls from people who are experiencing emotional crises. Many calls are from persons who may be in intense psychological pain and are struggling with the idea of suicide. Hotlines are most often staffed by trained volunteers who offer a caring, compassionate ear and, if desired by the caller, provide information about types of therapy or help available. Recent studies on hotlines, however, have shown that, while callers may need help, most are not acutely suicidal. For those who may be potentially suicidal, the kind of short-term help offered by a hotline alone may be inappropriate. Moreover, people who call hotlines rarely provide enough personal information to permit followup necessary to measure hotline effectiveness.

In addition to hotlines, centers might provide counseling, short-term therapy, referral information, drop-in group counseling, day care, community outreach programs, suicide prevention training, grief counseling, and support for survivors. Some offer longer term care, continued contact, and followup; some provide intervention teams to assist school officials when suicides occur among the student body.

Centers usually have referral networks--a consulting staff of psychologists, social workers, psychiatrists, health professionals to call upon for treatment of troubled individuals, access to other community services such as law enforcement, social service or mental health agencies, and emergency medical personnel--to serve as back-up resources.

School-based interventions

School systems offer an opportunity for reaching the largest number of young people. The types of programs offered and the populations served vary greatly. Many school initiatives in suicide were instituted in response to local legislation or community pressure following a wave of suicides within a particular school or school district.

One type of school program does not deal directly with suicide, but is designed to help

youth develop skills to cope with stressful life events and feel better about themselves. Typically, these curricula may emphasize ways to cope with problems that seem unsurmountable to young people who often view things with a narrow perspective and limited experience. Enhancing young people's problem-solving, decision-making, and social skills through such educational programs and support networks might equip youngsters to function better in their environment.

Another type of school program attempts to improve the ability of the student body to recognize suicidal behavior and take steps to prevent it. Such programs alert both potential suicides and their friends to the signs and symptoms that precede a suicide. Students may be encouraged to discuss suicidal thoughts, talk about feelings for friends lost to suicide, and discuss how friends might intervene when a troubled youngster is identified. These discussions are usually led by trained school personnel or outside professionals and may take place in large assemblies, in small groups, or in the context of a regular class. Afterschool hotlines and "peer counseling" (in which troubled students discuss their problems with peers specially trained to lend emotional support) are other types of supportive school initiatives.

School-based education programs have generated controversy. Some parents fear that open discussion could introduce the idea of suicide to teenagers who had never thought of it before. School officials may believe that the many demands on the school system, limited funding for special initiatives, and liability concerns preclude suicide prevention programs.

Others, however, believe that numerous beneficial effects are possible. For example, open discussion of suicide might facilitate disclosure of some student's preoccupations with suicide, which might in turn lead to interventions to reduce the risk of suicide. Improving coping skills might aid in raising self esteem, reducing school failure, increasing the sense of control young people have over their future, and reducing depression and self-destructive behaviors, thereby generating better mental health even among persons at low risk for suicide.

Evaluating prevention programs

Despite hundreds of programs offering a wide range of services designed to help troubled individuals, little is known about their effectiveness in preventing suicide. There is very little sound evidence to suggest that any given approach works better than any other, if at all, in preventing or reducing suicide. Developing a rational strategy for preventing suicide requires that we learn more about the effectiveness and costs of many proposed interventions. We need to identify and know more about prevention programs that work, groups for whom particular interventions seem to be most effective, circumstances under which interventions work best, and the optimal timing for such interventions. This knowledge is best obtained through a program of carefully coordinated and directed intervention research. The costs of these interventions must be studied while their effectiveness is evaluated.

Because the underlying factors influencing suicide among the young are so varied and involve numerous personal, social, and biological factors, no single intervention approach will work for all young people. The task force acknowledges that the suicide problem is too urgent to wait for the results of research evaluations; a wide range of efforts to prevent suicide must continue while evaluation components are completed.

Action Plan

The following activities should be implemented to assess the potential, but as yet unknown effect, of programs designed to prevent suicide.

- Commission state-of-the-art reviews of evaluation methodologies and techniques for evaluating preventive interventions with general population samples.

Evaluation methodology is a science whose systematic application to suicide prevention can be expected to yield cost-saving benefits over the long term. Evaluations can be difficult and costly because they require collecting information about large numbers of people. Program designers and service providers frequently know little about evaluation. Instruction in the basics of evaluation will help them become aware of state-of- the-art methodology and encourage them to design and manage services that can be evaluated.

- Develop statistical packages and procedures to measure low base rate phenomena over time in general population samples. Rare events are subject to considerable statistical variability and the youth suicide rate would have to be reduced for several years before it could be meaningfully assessed and interpreted.
- Develop typologies of suicide prevention centers and hotlines. Hundreds of suicide prevention centers operate in the United States today offering many different kinds of services. A systematic classification or cataloging of these services will enable us to have a better idea of the range and variety of services offered (e.g., education, treatment, referral), of the problems they address, the populations they serve, and the costs they incur.
- Produce guidelines for evaluating existing models of suicide prevention centers and hotlines. The American Association of Suicidology has pioneered work in developing standards by which suicide prevention centers can be judged and certified. Similar guidelines should be developed for the collection of uniform data for purposes of evaluation.
- Sponsor workshops to train investigators in evaluation methods. Support evaluation research on a range of current suicide prevention programs. This research should stimulate innovative approaches to evaluate:

  a. education programs. There is a need to evaluate programs which focus on improving young peoples' general coping skills and programs which specifically address suicide prevention.

  b. school-based ecological/environmental interventions. Programs in this category include efforts to modify the school environment in ways which reduce stress and increase opportunities for youngsters, such as making school transitions easier, modifying the social climate, and reducing school failure and dropout rates.

  c. suicide prevention centers and hotlines. It is important to know whether such programs work, for whom, and why they work, the parts of the programs offered by these centers that are most effective, and how these services could be made even more effective.

These steps should be implemented by agencies within the Public Health Service, such as the Alcohol, Drug Abuse, and Mental Health Administration, and Centers for Disease Control.

An indicator of progress in implementing these activities will be the timely completion of the recommended reports, workshops, studies, and guidelines; and the timely funding of this evaluation research.

INTERVENTIONS ADDRESSED TO SPECIFIC POPULATIONS

RECOMMENDATION 3b.

Evaluate the effectiveness of interventions focused on specific populations, including:

- **Programs to educate and train gatekeepers,**

- **methods of early identification and treatment of potentially suicidal young people,**
- **specific treatment modalities for actual suicide attempters,**
- **methods to improve recognition and treatment of depression by health and mental health professionals, and**
- **programs for survivors.**

Programs designed to deal specifically with young people at elevated risk for suicide need to be carefully evaluated for their effect on suicide prevention. The cost effectiveness and cost-benefit of these programs also need to be evaluated.

Gatekeepers

Gatekeepers are individuals most likely to come into contact with suicidal persons. They are persons in responsible positions, who deal with youngsters on a regular basis, and have the opportunity to observe their behavior over time. Gatekeepers include school personnel, counselors, coaches, parents and family members, friends, youth group or scout leaders;, personal physicians, and clergymen. Training gatekeepers to identify and refer young people at high risk of later suicide, increases the likelihood that suicidal youth will be identified and offered mental health services.

Various programs, directed at teachers and administrators, try to increase the sensitivity of responsible individuals to the characteristics of the suicide-prone child. The training programs use lectures, videotaped interviews with teenagers who have made previous suicide attempts, small discussion groups, and lists of suicide "early warning signs." Parents can also be trained to act as gatekeepers and many parents have been urged to rid the home of guns, medicines, and other potentially lethal weapons, and to seek professional help for high-risk children.

Methods of early identification of potentially suicidal young people.

A major problem in reducing youth suicide is the difficulty in identifying young people at greatest risk of suicide, assessing their degree of suicidal risk, and directing them to appropriate treatments. Almost all mental health professionals and many other service providers rely on their clinical experience and judgment for indications of suicide in their patients. A more objective method would rely on a screening procedure or "test" that could separate young persons likely to engage in self-destructive behavior from other people at normal or low risk.

Ideally, such a screening instrument should be sensitive (correctly identifying almost all the young people at high risk in the population tested), specific (accurately differentiating high risk youth from those who are at normal or low risk), inexpensive, quickly administered by a wide variety of personnel--school counselors or nurses, emergency room staff, volunteer crisis center workers, and trained mental health professionals--and be easily scored and interpreted.

Screening could be done in stages: the initial stage might consist of a short paper and pencil questionnaire; "high scorers" would enter the second stage which might consist of a more precise assessment, perhaps an interview with the school guidance counselor. A third stage might be a longer interview with a discussion on developing suicide screening instruments for adolescents and young adults (please see paper by Yufit in volume 4).

Screening instruments would be useful to mental health clinicians and would help less experienced clinicians to identify suicidal young persons and assess their suicidal risk; it would also aid teachers, parents, and others to recognize the suicide-prone youngster, and aid health care planners who need to direct limited treatment resources to where they would do the greatest good. Research support should be provided for developing

and evaluating the validity and reliability of such a screening procedure.

Specific treatment modalities for suicide attempters.

We need to develop specific treatment strategies for adolescents who attempt suicide. Adolescent suicide attempters are a very diverse group who often present a number of problems simultaneously--mood disturbance, drug and alcohol dependency, and aggression, to name but a few. It is difficult to know which problems will improve in therapy, the order in which the problems should be addressed, and what approach would be most effective for a particular individual. At the present time, there is no evidence to demonstrate that suicide attempters who are treated with one particular treatment--psychotherapeutic, behavioral, or psycho-pharmacologic--might not have done just as well with some other treatment or with no treatment at all.

Innovative approaches to therapy for adolescent suicide attempters need to be developed, tested and evaluated. Because adolescents are not easily retained in therapy, (young people and their parents are very resistant to treatment), brief psychotherapy and quick results are desirable, especially for low income and minority patients. Cognitive- behavioral approaches, for example, might meet the need for brevity and activity. Therapies should focus quickly on specific problems. Further, good therapy for adolescents is active, teaches skills, uses outside resources, engages the patient in problem solving, and involves the family.

Methods to improve recognition and treatment of depression by health professionals.

An estimated one-third of youth suicides are persons suffering from some form of depression. Depression is a relatively common biological disorder with recognizable symptoms, but most health professionals and many mental health professionals fail to identify depression when it occurs. Physicians oftn look for depression only after physical causes of patients complaints (fatigue, lethargy, loss of appetite) have been ruled out.

In addition, even when the appropriate diagnosis of depression has been made, health professionals often fail to treat it effectively. It is widely believed that marked improvements can be made in preventing suicide by improving the recognition and treatment of depression. This can be done through public awareness campaigns and educating students in the health care professions, through lectures and supervised patient care experiences. Awareness in practicing health and mental health professionals can be increased through articles in the medical literature and continuing medical education courses. Questions on licensing and specialty examinations would reinforce the incentive to learn to recognize and properly refer or treat depression.

Programs for survivors

Family and friends who have lost a loved one by suicide often experience significant psychological pain. They feel guilty because they believe they have somehow failed the deceased. They want to know how they can cope with their loss and what they could have done to prevent the suicide. There is evidence of increased suicidal risk among survivors.

Survivor support programs (sponsored by self-help groups, suicide centers, or other community resources) can help families cope with their loss. Systematic evaluation studies, however, are needed to show whether such programs can lessen the chances of another suicide.

Action Plan

The following activities are suggested for evaluating programs targeted to different populations:

- Commission state-of-the-art reviews of evaluation methodologies and techniques for evaluating preventive interventions with high risk populations.
- Collect and analyze all that is known about existing intervention modalities for targeted populations.
- Produce guidelines for evaluating existing training, detection, referral, and treatment interventions for identified populations.
- Support research to evaluate suicide prevention programs and stimulate innovative approaches to:

  a. evaluate existing programs.

  b. replicate and evaluate programs.

  c. develop new programs that can be evaluated.

- Support research to develop and evaluate sensitive, specific, valid and reliable screening procedures to identify young people at high risk for suicide.
- Develop and evaluate programs for training health and mental health professionals to better identify and treat depression.
- Support the NIMH project D/ART (Depression/Awareness, Recognition, Treatment). D/ART is an educational effort currently focusing on training mental health professionals and primary care practitioners on recent advances in diagnosis and treatment of depression, including adolescents. The program is launching a public education campaign to inform the general public about the symptoms of depression.
- Encourage assessment, analysis, and evaluation of intervention studies for suicide attempters. Disseminate exemplary intervention programs for suicide attempters. Most researchers think that persons who attempt suicide should be considered separately from those who complete suicide. Although related, there are important demographic, social, and clinical differences between the two groups of people which need to be studied.

These activities should be implemented by agencies within the Public Health Service, such as the Alcohol, Drug Abuse, and Mental Health Administration; the Centers for Disease Control should serve as a central resource for this activity. Mental health researchers and mental health and social service delivery components should also be involved in all activities related to helping those who attempt suicide.

Indicators of progress in implementing these activities will be the timely completion of commissioned background materials and reports, and the timely development and release of requests for applications for research grants.

LETHAL MEANS OF SUICIDE

RECOMMENDATION 3c.

Explore and evaluate ways of limiting the access of youth at high risk of suicide to lethal means of suicide, especially firearms (which account for the preponderance of deaths by suicide).

The use of guns as the primary method for suicide is unique to the United States. The methods of committing suicide have changed dramatically in this country during the past 15 years. The proportion of suicides committed by firearms increased for both young males and females while the proportion of poisonings declined. For females the leading method of suicide changed from drugs to firearms. Firearms account for more than two-thirds of male suicides.

It is argued that because firearms account for such a high proportion of suicides, and because guns are easily available, limiting the availability of guns might curtail suicide rates. There is evidence that controlling access to

handguns may indeed reduce the overall frequency of firearm suicides. Some investigators suggest that if access to guns were restricted, the impulse to commit suicide might pass, and some suicides would be prevented. Alternatively, if guns were unavailable and potential suicides had to switch to other means, they might choose a less lethal method. One study has shown that teaching the principles of gun safety, another recommended intervention, offers little hope of reducing the death toll from firearms.

We need to know much more about how many guns are accessible to young people, where they come from, and what sort of risks they represent. We need to know how we can limit their use in youth suicides while recognizing the interests of many people in having and using firearms for recreation and protection.

Whether the increasing availability of firearms is one of the many causes of the rise in youth suicides is unknown. Nevertheless, when confronted with a suicidal young person, it would be prudent for a health professional to determine whether the family has a firearm, and if so, have the family remove the firearm, at least temporarily, from the environment of the person who is contemplating or threatening suicide.

In some institutions, such as psychiatric hospitals and prisons where suicides are known to occur, special precautions have been developed to prevent residents from taking their lives. The suicide rate for juveniles in jail, however, is still five times higher than national averages and the first few hours of confinement are the most dangerous. In jails, careful observation, separation of juveniles from adults, and removal of personal items that can be used as means for hanging might reduce the chance of suicides.

Some communities have erected barriers on bridges to preclude suicide attempts, or put signs or telephones on popular suicide bridges urging potential jumpers to call a local suicide prevention center instead of jumping.

Other efforts for which effectiveness is unproven, but nevertheless seem prudent include asking physicians to limit the amount of medications prescribed to a suicidal patient so that the person never has a lethal dose of the medicine available. Unfortunately, some potentially suicidal youths who are denied access to their chosen means of suicide will choose a different method and will still commit suicide.

Action Plan

- Enforce current laws regarding firearms sales, possession, transport, and use by minors. The Justice Department, Bureau of Alcohol, Tobacco, and Firearms, and various State and local agencies should implement this step.
- Evaluate the effectiveness of a variety of additional laws to restrict the availability of guns to minors. Evidence suggests that stricter handgun control laws may lower the incidence of suicides by firearms.
- Limit gun advertising directed to or involving minors. The Federal Communications Commission, Congress, and the public must see that gun advertising is curtailed.
- Encourage research on making guns safer; improve safety features, such as indicating clearly when guns are loaded. Congress and DHHS can mandate improved safety for guns.
- Conduct research to develop an effective gun safety education program. Health educators in cooperation with the National Rifle Association can effect this step.
- Monitor those States and communities that have altered access to lethal means of suicide.
- Evaluate programs to limit access to and modify lethal means of suicide. The

Federal research agencies should implement this step through requesting applications for research.

Recommendation 4:

SUICIDE PREVENTION SERVICES

Support the delivery of suicide prevention services by:

a. **Increasing the number of health care professionals specializing in mental health problems of young people.**

b. **Supporting demonstration programs for suicide prevention in health care facilities and other agencies that deal with young people.**

c. **Integrating suicide prevention with other health promotion agendas.**

d. **Caring for suicidal patients in nonpsychiatric hospitals.**

e. **Obtaining standardized clinical histories from patients belonging to groups at risk for suicide.**

f. **Providing mental health information, consultation, and liaison among personnel in health service, social service, and juvenile justice agencies.**

g. **Decreasing financial and legal barriers to care.**

h. **Providing technical assistance and information to communities in which youth suicides have occurred.**

INTRODUCTION

Emergency rooms, general medical clinics, family practice settings, health maintenance organizations, and special medical clinics for young people have frequent contacts with troubled children and adolescents; for some youngsters, they are the place of last resort. While the physical health of these young people may be well attended in an emergency room following a suicide attempt, the personal, school, or family problems which may have brought the youngster there, can go unnoted. Since many of these adolescents in trouble may be at risk for attempting or completing suicide, physicians, nurses, and others in these settings should be alert about suicide risk, have the training and the resources for identifying those in danger, and be knowledgeable about the appropriate disposition or referral that may help a troubled child.

HEALTH PROFESSIONALS

RECOMMENDATION 4a.

Increase the number of mental health professionals specializing in the psychological assessment and treatment of children and youth.

Children and adolescents are generally underserved by mental health professionals. Recent research suggests that most suicidal teenagers and young adults suffer from a

number of psychiatric disorders. Suicide, or an attempt at suicide, is in most instances, a symptom of underlying psychological illness-such as depression or conduct disorders characterized by impulsive, aggressive or antisocial behaviors--frequently mixed with drug abuse. While the precipitating event for the suicide often is unrelated to the psychological disorders, the suicide is an expression of hopelessness a young person feels when faced with problems with which he/she cannot cope. Although we may not yet know the best ways to treat the specifically suicidal element in their psychopathology, their other disorders and problems can usually be helped by trained mental health professionals. There are two problems however. First, not enough trained mental health professionals are qualified or certified to treat children and adolescents. Second, other health professionals who are in a position to see high-risk youth are not adequately trained in this area.

During the past ten years, health professions schools, e.g., schools of social work, nursing, psychology, and psychiatry, have expanded their training programs in suicide prevention. The scope of these instructional programs varies widely--from single lectures on the topic to curriculum segments containing many hours of didactic teaching and case experience. Courses may cover identification of populations at risk, individual case assessment techniques, techniques in crisis intervention for the suicidal person, and special care needs of particularly high-risk populations. Little attention, however, is likely to be given to adolescent suicide, partly because a well-defined body of knowledge does not exist, and partly because few individuals with specific experience or training are available for teaching.

Many observers believe that primary care physicians often fail to recognize mental disorders or other factors that may predispose young people to suicidal behavior. Even physicians trained to deal with stressful health issues such as chronic illness or unwanted pregnancy may not be aware of the suicidal risk imposed by some medical conditions, especially during puberty and adolescence. Not only are more professionals needed in fields such as adolescent medicine, child psychiatry, clinical and adolescent psychology, psychiatric social work, and adolescent counseling, but primary care physicians need training in diagnosing psychiatric syndromes and suicidal behavior, and in intervening and referring young patients to the psychiatric helping system, when appropriate.

States, counties, and communities need to develop services related to the prevention of suicide. The Omnibus Budget Reconciliation Act of 1981 authorized block grants to States for mental health, alcohol abuse, and drug abuse services. Services related to suicide should be a component of these programs.

Action Plan

- **Provide inducements for health and mental health professionals to specialize in the care of adolescents.**

  Reward special training to encourage entry into fields such as adolescent medicine and psychiatry.

  In determining reimbursement rates, governmental and third-party payors should recognize specialized adolescent certification. Reimbursement rates could also act as economic incentives if third- party payors increased the allowable medical insurance charges for treating young people with depression or acute psychological crises.

  Explore, with accreditation organizations, methods for abbreviated training (for example, shortened residency requirements) for those who have had experience in related areas.

- **Enlist support for training programs.**

  Solicit support for training adolescent health specialists from profes-

sional organizations, child advocacy groups, and parent groups organized to help teens with mental health problems.

- **Training programs for health professionals should focus on groups at high-risk for suicidal behavior.**

  Training programs for mental health professionals should address the mental health needs of specific groups of young people who are at high risk of suicide. These are thought to include: runaways and homeless teenagers, teenagers with sexual identity problems, teens with certain long-standing character abnormalities, disturbed teens whose close friends or family members have attempted suicide, pregnant and unmarried teenagers, and substance abusing teens with associated depressive symptoms.

- **Include as training components, sensitivity to various cultural groups, language differences, and sexual orientation.**

Progress in achieving this recommendation can be measured by a greater number of professionals certified to serve children and adolescents.

DEMONSTRATION PROGRAMS

RECOMMENDATION 4b.

Support and evaluate demonstration programs for suicide prevention in emergency wards, health maintenance organizations, and adolescent health care facilities. Coordinate health service demonstration programs with schools, social service agencies, and religious organizations.

The health service system is characterized by specialization and fragmentation among professionals, health care settings, and reimbursement services. In addition, the health care service system is primarily oriented toward treating acute physical problems, one at a time. As a result, while many adolescents are treated for suicide attempts or other self-destructive behaviors by primary or emergency health service providers, these treatments frequently are directed at their physical problems (such as drug overdose or wrist lacerations) without adequate attention to psychological and social problems. Little or no followup is provided. Even if a psychiatrist did see a teenager in the emergency room after a suicide attempt, if the psychiatrist is untrained in adolescent psychiatry, he may omit interviewing the parents because it is not the practice in adult psychiatry to extend the psychiatric evaluation beyond the identified patient.

Personnel in health care settings where distressed adolescents may seek care, such as substance abuse facilities for youth, runaway shelters, community and migrant health centers, and health maintenance organizations, have a unique opportunity to identify and intervene with high risk individuals. These settings provide access to a population who may be too frightened or ashamed to seek assistance from traditional social service agencies. But they must have training in identifying, assessing, and treating suicide attempters.

Demonstration programs should be designed to facilitate the evaluation of feasibility, efficacy, and cost-benefit. Because suicide is a rare event, however, a reduction in the suicide rate may not be the only indicator of the success of single program. Other appropriate indicators of diminished suicidal risk include: lifting of depression for a significant number of youngsters in therapy, cessation of suicidal thoughts for a significant number, fewer admissions for drug overdoses, fewer teenage "accidents," fewer school failures, or fewer dropouts from family-oriented treatment programs.

Action Plan

- **Survey the range of screening, assessment, and intervention measures currently used in emergency rooms and assess their efficacy for different types of settings.**

  This assessment should address costs and charges for these services as well as the efficacy of these services in terms of reduction of risk-associated behaviors.

- **Convene a task force to address guidelines for providing integrated comprehensive services.**

  a. Address guidelines for adequate screening, identification, and treatment for adolescents at risk.

  b. Develop mechanisms to protect hospitals and other health settings and health providers against financial loss or jeopardy for treating adolescents presumed to be at risk for suicide.

  c. Include as members of the task force, representatives of emergency room physicians and nurses, social workers, and members of the Joint Commission on Accreditation of Hospitals.

- **Enlist collaboration between Federal agencies when announcing requests for demonstration and research projects.**

  Relevant organizations that should cooperate in projects studying adolescents at-risk for suicide include: agencies concerned with maternal and child health, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), (comprised of the National Institute of Mental Health (NIMH), National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA)), and the Centers for Disease Control (CDC). All proposals for grants or contracts should contain a mandatory evaluation component.

  Examples of the kinds of programs to be solicited include:

  a. Small grants for community-initiated programs and geographic areas.

  b. Grants to hospitals and service agencies for major demonstration programs.

  c. Grants for evaluation of more than one program with systematic comparison between programs and outcomes.

  d. Small contracts to develop research instruments and tools for screening, identification, and assessment. For example, a contract to develop computer-assisted test batteries for screening that would allow the patient to interact with the computer screen directly or with assistance from a health worker.

- **Encourage partnerships between foundations and government agencies.**

  a. Convene a conference to be attended by representatives of various foundations which have interests in adolescents, health, or suicide; and representatives of ADAMHA, CDC, and other agencies concerned with maternal and child health.

  b. Facilitate joint ventures in funding and support. For example, explore the possibility of NIMH assisting in evaluation of programs funded by private foundations.

HEALTH PROMOTION

RECOMMENDATION 4c.

Integrate suicide prevention into programs that address a wide range of self-destructive or problem behaviors such as substance abuse, interpersonal violence, and unwanted teenage pregnancies.

Many adolescents are at risk for several different self-destructive or problem behaviors which may be associated with or lead to suicide. A variety of programs already exist that are directed at helping young people with these problems, e.g., substance abuse programs, teenage pregnancy programs, runaway shelters. It would make sense to integrate elements for the detection and referral of suicidal youth into these programs. Similarly, when new services are initiated, it would be more efficient to address many different problems within one program, than to focus on suicide alone.

In addition, efforts to reduce suicide by improving the general coping skills of high risk youth--e.g., helping youth to recognize and talk about their feelings, ask for help when needed, identify how and where to get help for oneself and others--should be beneficial in preventing a wide range of problem behaviors.

Action Plan

- **Bring together representatives of agencies that currently provide youth services (in the areas of substance abuse, teenage pregnancies, interpersonal violence, runaways, and suicide) with persons experienced in developing comprehensive programs for high-risk adolescents.**

  This group should work towards developing and implementing integrated approaches to problem behaviors in young people.

- **Develop training programs for service providers and educational material for high-risk youth that address general coping skills and suicide prevention in the context of a wide rage of problem behaviors.**

CARE OF SUICIDAL PATIENTS IN GENERAL MEDICAL SETTINGS

RECOMMENDATION 4d.

Develop guidelines and provide incentives for evaluating and caring for suicidal patients in nonpsychiatric hospitals and other general medical settings.

Some young people at risk for suicide might best be treated outside of a psychiatric hospital because they:

a. have a medical problem which requires hospitalization in a medical (as opposed to a psychiatric) facility;

b. are receiving care from a physician other than a psychiatrist; or

c. do not have geographic or financial access to a psychiatric facility.

Hospitals in the United States have no uniform standards of care for suicidal or high-risk patients. Nor is there any uniformity among hospitals in suicide prevention policies. After surveying hospital practices for several years, the American Association of Suicidology is in the process of developing a set of recommendations for standards of care for suicidal patients; they are awaiting approval by the Joint Commission on Accreditation of Hospitals.

Action Plan

- **Once developed, incorporate appropriate guidelines into policy and procedure manuals of health care facilities.**

- **Review compliance with guidelines by using existing review mechanisms such as record review teams and accreditation groups.**

STANDARDIZED CLINICAL HISTORIES

RECOMMENDATION 4e.

Prepare guidelines for obtaining standardized clinical histories from suicide attempters and from patients who belong to certain high risk groups.

In general, when a patient comes into a hospital with an injury that may have been intentially self-inflicted, the medical records tend to contain only a description of the physical injury. Very little is recorded about the patient or the circumstances of the injury.

Taking a broad-ranging history with a standard set of questions in cases where suicide risk is suspected, may lead to the identification of specific problems or diagnoses which otherwise might have escaped attention. Using a standard clinical history outline for high risk young people entering a medical setting will have further educational benefits by pointing out suicidal behaviors or thought where they might not have been suspected, and in identifying other specific problems in suicidal adolescents which could be treated.

Action Plan

- **Once developed, incorporate appropriate guidelines into policy and procedure manuals of health care facilities.**
- **Review compliance with guidelines by using existing review mechanisms such as record review teams and accreditation groups.**

NETWORKING AND LIAISON

RECOMMENDATION 4f.

Provide information, consultation, and liaison among health services, social service programs, and juvenile/criminal justice personnel targeted at high-risk youth and families.

Many high risk youth do not use traditional health care or mental health services, but they are more likely to have contact with social service and juvenile justice agencies. Shared information, improved networking and cooperation among a wide range of agencies and individuals who serve youth might ensure that fewer people "fall through the cracks" and that each youngster receives appropriate and optimal care.

Action Plan

- **Encourage grass-roots suicide prevention and survivor groups to link with groups involved in prevention of other risk-taking behavior, for example, the National Federation of Parents Against Drug Abuse, Al-Anon, Alateen, to share information and combine related activities.**

FINANCIAL AND LEGAL BARRIERS TO CARE

RECOMMENDATION 4g.

Explore ways to decrease the financial and legal barriers that limit the access of suicidal youth to appropriate care.

Many health insurance policies contain a clause excluding coverage for "self-inflicted" injuries. If reimbursement for care is refused, this can provide an adverse incentive for doctors to misdiagnose a suicide or a suicide attempt. Increasing allowable medical insurance charges for treating depression or acute psychological crises could improve treatment for these young people.

Another treatment barrier specific to adolescents is the need to obtain parental consent for counseling. In many jurisdictions, young people cannot receive services without the signature of a parent or guardian. Parents sometimes refuse to grant permission for counseling their children or refuse to pay for treatment. The problem is compounded when young persons view their parents as primary contributing factors to their troubles. Youngsters may find it difficult to seek treatment voluntarily if they do not want their parents to know about it, or cannot pay. To increase the accessibility of services for adolescents, changes in consent laws must be addressed.

Fear of legal liability may also keep many mental health professionals from serving potentially suicidal youth. Lawsuits alleging negligence following a suicide have been brought against service providers. Insurance rates have also increased for some services such as hotlines or crisis intervention centers. A possible solution is to offer liability insurance to keep concerns about liability from inhibiting the provision of services by mental health professionals to suicidal youth.

Action Plan

- **Legislative action should be taken by State and Federal legislative and regulatory bodies to relieve restrictions on health insurance policies for both the service provider and the patient.**

  Laws requiring consent of parents for treatment to minor children should be reassessed. Progress can be measured by the introduction and passage of relevant legislation.

TECHNICAL ASSISTANCE

RECOMMENDATION 4h.

Provide information and technical assistance for communities in which youth suicides have occurred. these services should be provided through state and local public and mental health agencies.
(See Recommendations 1c and 5b.)

The death of a young person by suicide may place other young, susceptible persons in the community--including those who either knew the young person who committed suicide, or heard about it through news reports--at risk for suicide.

Public health authorities advocate, from experiences learned from other communities in which multiple suicides occurred, that a systematic plan for a communitywide response to a young person's suicide should be developed. The knowledge that technical assistance is available in time of crisis can be helpful to a community and relieve the sense of panic and fear that might otherwise terrify school or community officials who fear multiple suicides. If possible, the plan should be developed before one or more suicides raise the possibility of a suicide cluster (see discussion of suicide clusters, Recommendation 1c). Because there is no proven effective intervention plan, each community should prepare its own response, taking into account its own needs and resources.

Representatives of State health departments, existing community health and mental health agencies, school system leaders, and the available community leadership should work together to establish a suicide response plan. Community public health agencies can request information and technical assistance from State health departments. State public health agencies in turn, can consult CDC's Division of Injury Epidemiology and Control.

Action Plan

- **The following components are appropriate for inclusion in a community's response plan to one or more young suicides. Plans should include:**

  1. A procedure for identifying young

people considered to be at high risk for suicide. These people might be identified by teachers, guidance counselors, parents, peers, police or mental health professionals. Persons thought to be at high risk include close friends of the persons who committed suicide; young people with a history of suicide threats or attempts, or a family history of suicide attempts or suicide; young people with serious emotional problems; people who may be likely to identify with the deceased; and young people who may be socially isolated or without emotional supports. The plan should specify clear and simple procedures for referring these persons to mental health services and care providers.

2. Identification and assessment of community resources. The plan should determine who is available to work with school authorities (such as local or State mental health officials, public health authorities); who is available to counsel high-risk students (therapists, psychologists, psychiatrists, guidance counselors); and who can counsel surviving family members. It should designate persons who could serve a coordinative function if a crisis should occur (such as the mayor, superintendent of schools, mental health clinic director, citizens). Existing facilities should be identified that could provide immediate crisis counseling through a 24-hour hotline and walk-in clinics.

3. Identification of a spokesperson for the school or community. This person should be responsible for handling all interactions with the media and for providing accurate and timely information to concerned parents and community members. Accurate information is important because rumors spread quickly in a community, and because the media will want to present news about the suicide to the public.

4. Acknowledgement of the importance of not romanticizing the tragic death of the young person. Activities that romanticize the suicide might increase the likelihood of other young people committing suicide by imitation or by increasing the degree to which they identify with the deceased person. During the period of mourning, people tend to remember the good qualities of the youngster who committed suicide rather the serious problems he may have suffered. What emerges can be a romanticized portrait which is frequently carried by the media. Elaborate funerals can perpetuate this romantic view. When appropriate, it may be helpful to acknowledge that the deceased had problems that set him or her apart from most other young people, for example, mental illness or problems related to alcohol or drug abuse. In such cases, it may be important to stress that the problem set the suicidal individual apart from other youngsters and that the problem had better solutions than suicide.

Recommendation 5:

PUBLIC INFORMATION AND EDUCATION

Inform and educate the public and health service providers about current knowledge in the prevention, diagnosis, and treatment of suicide among youth. These include:

a. **Programs to improve the ability of gatekeepers to recognize clues to suicide.**

b. **Training in suicide risk assessment and referral for health care professionals and educators.**

c. **Dissemination of information on youth suicide and suicide attempts.**

INTRODUCTION

In terms of both human and financial costs, it is very much in the public's and family's interest, to learn ways of recognizing the warning signs of suicides and suicide attempts. If the suicide of a young person is to be prevented, that person must be identified as early as possible and brought into the helping system. It is likely that the young person is suffering from some kind of emotional or psychological disorder which might be resolved with proper treatment.

EDUCATION OF GATEKEEPERS

RECOMMENDATION 5a.

Develop special programs to reach gatekeepers to the health care system (such as teachers, parents, clergy, and counselors) and improve their ability to recognize clues to suicide.

Most potentially suicidal youngsters give clues to their suicidal intentions to a friend, a family member, or a professional person, either verbally or by their behavior--a kind of "reaching out for help." Numerous people in a youngster's environment may have the opportunity to recognize and identify some of these clues to self-destructive behavior and can refer the youngster to a helping professional. These people are called "gatekeepers"; they are persons most intimately and extensively in contact with a particular suicidal person and are probably in the best position to recognize the clues and render help. Gatekeepers include parents, relatives, teachers and other school personnel, sports coaches, neighbors, peers, clergy, and hairdressers.

Improving the gatekeepers' knowledge of the clues to suicidal behavior, making parents, more aware of the signs and symptoms of psychiatric problems, and making it clear where help is available, increases the probability that a potentially suicidal youth will be identified and brought to the attention of a treating professional.

Further, adolescents, themselves, are able to understand the importance of recognizing signs of trouble both in themselves and in their friends and they can be taught ways to seek and find help for people at risk of suicide.

Action Plan

- Prepare and disseminate teaching material. This should be undertaken by appropriate government agencies together with professional organizations including, the American Psychiatric Association, the American Psychological Association, the American Academy of Child and Adolescent Psychiatry, the American Medical Association, the American Academy of Pediatrics, the American Academy of Family Practice, and the National Association of Social Workers.
- Include teaching material in curricula. Information should be circulated to training directors and accrediting organizations for those disciplines or professions whose members are likely to be in the position of gatekeepers.
- Reach personnel in programs that deal with high-risk youth, such as criminal justice programs, programs for substance abusers, and programs for unwed, pregnant teenagers.

EDUCATIONAL PROGRAMS FOR SCHOOL SYSTEM PERSONNEL

RECOMMENDATION 5b.

Include information on suicide risk assessment and referral in the professional training and continuing education of school system personnel.

Schools provide one of the best opportunities for a wide variety of people--bus drivers, school nurses, teachers, principals--to interact with students and parents. Children at risk for suicide often communicate that risk by behavioral indicators. School system personnel can be trained to recognize the high suicidal risk of some children, while not being responsible for diagnosis and treatment.

A few studies have demonstrated that teachers, counselors and other students were increasingly able to deal with suicidal students following crisis training for counselors, inservice training for teachers and specific instructional programs for selected students "counselors". For example, after such a program, participants were less likely to view a suicidal statement as "nothing to worry about" and were more knowledgeable about the mental health referral process. While it is not known whether these interventions decrease the actual suicide rate, these efforts can play a significant role in providing needed support to students and education about suicide.

Preparation and education should include:

- Information on acute and chronic risk factors for youth suicide.
- Information on behavioral manifestations of depression, schizophrenia, and conduct disorders in the school setting.
- Information and sources for referring students at risk.
- Training in communication skills for approaching and engaging children at risk and their families.
- Developing plans for school systems, in collaboration with community leaders and mental health professionals, to respond to a student death or suicide. The elements of a response plan, more fully discussed in Recommendation 4, are summarized here. It should include:
  - measures to identify students with increased susceptibility to suicide.
  - identification of school and community resources.
  - procedures for referring high-risk stu-

dents to appropriate services and to the school-community network for troubled students.

- establishment of procedures and identification of a school spokesperson to ensure responsible dissemination of accurate information to the media and the community.

Action Plan

Develop training and continuing education programs on suicide risk assessment for school system personnel. The following steps should be taken in establishing such programs.

a. Assign responsibility for coordination of this project to a non-governmental organization such as the American Association of Suicidology, an organization of educators, or to another organization through a competitive process.

b. The coordinating organization should apply for funding from the Department of Education.

c. Assemble a consortium of representatives from educational, mental health, and suicide prevention groups.

d. Delineate behaviors likely to indicate potential problems, through information provided by specialists.

e. The coordinating organization and the consortium should review existing school programs and guidelines for risk assessment.

f. The consortium should identify model programs that include an evaluation component and a referral network.

g. The consortium should disseminate information about model programs in various specialty areas.

h. The consortium should suggest a process by which communities can adapt a model program to fit its needs. Choices should be based on a review of the recommended model programs with input from local specialists in education, the famiiy, and child mental health.

Collaborating groups in the consortium might include the following: the Parent Teachers Association, the National Education Association, the American Federation of Teachers, the Association for the Advancement of Health Education, the National Indian Education Organization, National School Board Associations, National Association of Social Workers, and the National Alliance of Pupil Services Organizations.

Progress in achieving this recommendation might be measured by: a) assessing teachers on the national teacher examination for achievement of desired skills, b) by assessing utilization of services in communities to determine whether referrals of potentially suicidal youth have increased, c) changes in the number of actual suicide attempts, and d) a greater number of programs in place for school personnel.

DISSEMINATION OF INFORMATION ON SUICIDE

RECOMMENDATION 5c.

Provide for dissemination of information on youth suicide and suicide attempts.

At the present time, a number of national organizations and hundreds of independent groups are working in the area of suicide prevention. Often information is not shared by these groups, many may not even know of each other's existence. In addition, countless individuals, including educational resource personnel, health professionals, and social workers are faced with problems relating to potentially suicidal youth. They need to have more information on ways to handle individual youngsters, set up education programs, and find referrals to more specialized expertise.

The establishment of an up-to-date, centralized, comprehensive suicide information sys-

tem or clearinghouse would have many benefits. Some advantages of such a source of information include:

- facilitating development and coordination of suicide prevention activities and programs,
- assisting and supporting public awareness and education efforts,
- serving as a referral resource for concerned individuals who want information about crisis intervention and suicide prevention services,
- preventing unnecessary and costly duplication of efforts, and
- facilitating linkages and networks among users and generators of information.

It is also anticipated that the Report of the Secretary's Task Force on Youth Suicide will be circulated widely among health care providers, educators, social service workers, and others who are in contact with troubled youth. It is a major effort in summarizing the present state of knowledge about youth suicide and should serve as a source of information and guidance to those interested in suicide prevention at the State and community level.

Action Plan

- Explore methods by which dissemination of information on suicide might best be accomplished. Provide adequate funding to support the recommended method.

  Delineate the elements of a suicide information clearinghouse, such functions, range of services, site, and required resources.

  Evaluate clearinghouse models already developed in other content areas, and examine these models in terms of the cost and effectiveness with which they "translate" and disseminate content materials.

  Investigate the usefulness of a clearinghouse that provides information on a number of problems affecting youth, such as substance abuse, interpersonal violence, and teenage pregnancy.

- Ensure that information on available suicide prevention services and programs is provided to local and State agencies.
- Identify and survey currently available resource centers and other sources of information about suicidal behaviors.

Recommendation 6:

BROADER APPROACHES TO PREVENTING YOUTH SUICIDE

Involve both public and private sectors in the prevention of youth suicide.

a. **Business**

b. **Philanthropy**

c. **Media and Entertainment**

d. **Youth Services**

e. **Religion**

f. **Legal and Political Changes**

g. **Criminal and Juvenile Justice Systems**

h. **Social Services**

i. **Families**

INTRODUCTION

Suicide among youth is the ultimate form of self-destructive behavior; a tragic end result of many different biological, psychosocial, and environmental problems. Suicide and suicide attempts cannot be dealt with in isolation from other self-destructive behaviors or from the many other social, health, and educational problems facing our nation's youth.

Suicide has many different causes; it is a potential problem for people from many different backgrounds who, might, in turn be helped by many different types of individuals or agencies. There are no simple, universally effective interventions that will solve the problem. For these reasons, suicide prevention will benefit from participation by all facets of the community--individuals, families, health professionals, schools, businesses, churches, civic groups, youth service agencies, and advocacy groups. Reducing suicide among youth also will require a variety of prevention and intervention strategies combining the efforts of all sectors of society, including Federal, State, and local governments--looking broadly at the prevention of a wide range of self-destructive behaviors.

Recommendation 6 includes opportunities for activities by many sectors and organizations which should participate actively in trying to prevent suicide.

BUSINESS AND INDUSTRY

RECOMMENDATION 6a.

Educate business and industry regarding suicide prevention awareness.

Businesses should provide and encourage the use of employee assistance counseling programs and health insurance programs (including mental health assistance) for employees and their families, when a family member is at increased risk of suicide.

People spend a good deal of their time in the workplace, thus making it an appropriate setting for education and intervention. For many years, the workplace has been an important source of health promotion activities--in promoting safety and protection from hazard and injury, providing services to help workers with alcohol and drug abuse problems, and helping employees to quit smoking and manage stress. Employee assistance counselors have become the locus of activities directed toward helping employees (and their families) overcome problems so they have higher morale and are more productive in the workplace.

Employee assistance services should be readily available to employees if a family member committs suicide, attempts suicide, or is at risk for suicide. Because people still believe that mental problems in a family are a mark of disgrace that influence both social status and employment opportunities, one of the primary requirements for employee services is that they be non-stigmatizing, confidential, and affordable (or covered under health insurance). It is not infrequent that parents will deny that their child is suicidal or has psychological problems because they fear that having a mentally ill child jeopardizes their job.

Action Plan

- Educate and train employee assistance counselors to observe and identify the risk factors for suicide. Educate the counselors to make appropriate referrals confidentially and expediently. Employee assistance programs that serve clients with alcohol, drug abuse, and family violence problems should also be aware of and address the elevated risk of suicide faced by these individuals or their family members. Further, employee services should provide for confidential referrals made by friends or coworkers of the individuals at risk.
- **Disseminate** all relevant, up-to-date material on suicidal risk, intervention, prevention, and referrals to employee assistance programs in the worksite.
- **Develop national, regional, and local resources** (particularly among local civic groups, chambers of commerce, and media) to educate businesses, if employee assistance programs are not available at the worksite.
- **Local health groups and advocacy groups, already in place, should work with businesses to provide information about suicide intervention and prevention.**
- **Encourage the development of identification and referral systems** for entry-level employees of large-scale employers of young people (including fast-food chains and retail stores) to assist employees who fail at or prematurely terminate their employment.

These plans should be implemented by organizations of employee assistance programs (Association of Labor and Management, National Alliance with Business, Consultation on Alcoholism, Inc.), the National Chamber of Commerce, specific private businesses, and the National Advertising Council. The Federal government should assist with dissemination of data and other information.

PHILANTHROPY

RECOMMENDATION 6b.

Encourage foundations and corporations to increase their support of youth suicide prevention programs.

Foundations and corporate philanthropic organizations have long funded initiatives for research, education, and health services related to a number of health problems including alcohol and drug abuse, teenage pregnancy, interpersonal violence, and stress. Young people with these problems are also at high risk for suicide. It is, therefore, desirable to educate foundation officials about the importance of preventing youth suicide and to stimulate foundations to allocate additional funding to research and prevention in this area.

Suicide prevention, whether educational or service related, can be integrated into already-established foundation supported programs. Further, foundations can facilitate cooperation between academic research institutions and direct service providers.

Action Plan

- **Stimulate active interest by foundations in soliciting and funding research relating to youth suicide by educating foundation officials about youth suicide and the issues related to it.**
- **Identify and stimulate potential cooperative efforts among research institutions, direct service providers, and foundations that might support youth suicide prevention.**
- **Integrate youth suicide issues into other adolescent programs funded by foundations.**

These steps should be implemented by foundation officials, supported by the background information, findings, and recommendations furnished by the Secretary's Task Force on Youth Suicide. Progress made in this area will be measured by the number of foundations increasing the amount of funding available for suicide prevention. Foundation interest in the compelling nature of the suicide problem and in opportunities for research can be facilitated through meetings held with youth suicide experts, appropriate task force members, and representatives of DHHS.

MEDIA AND ENTERTAINMENT

RECOMMENDATION 6c-1

Support efforts to define the harmful and beneficial effects of media coverage on suicide attempts. Pay particular attention to the way media portray suicidal behavior and contribute to imitative events, and to ways the media might prevent suicide.

Some research suggests that portrayal of suicide in the media may contribute to suicidal behaviors among young people exposed to these portrayals. At the present time, however, our knowledge about the influence of the media on suicidal and imitative behavior is not sufficient to serve as the basis for definitive guidelines.

A number of studies have presented contradictory evidence on the influence of all types of media coverage on various aspects of imitative behavior, including youth suicide. For example, some research studies reported an increase in suicides following televised news or fictional suicides, even when advance publicity was provided to raise public awareness about the fictional account. Other research claims that televised suicides might influence the method of suicide in persons already predisposed to killing themselves, but are unlikely to entice nonsuicidal young people.

Action to moderate these possible effects has been hampered by the existence of an adversarial relationship between the journalism/entertainment/media communities and mental health researchers. Collaborative research can both overcome this adversarial relationship and establish a reliable research base acceptable to both groups.

Action Plan

- **Encourage collaboration between the broadcast media and researchers in projects such as content analysis of fictional suicide stories to identify their harmful and beneficial elements.**
- **Support an extramural program to facilitate cooperation between media representatives and established researchers.**

The following steps should be included in the project.

- Identify and convene a university-based group to include at a minimum, representatives from departments of medicine, public health, journalism/communications, and entertainment media.
- Identify and survey current research efforts relating the effect of media on behavior, determine as yet unaddressed research questions, and organize a meeting of decision-making media personnel and researchers from an appropriate variety of disciplines. The goals of the meeting should include:

  a. fostering a collegial approach to the media and contagion problem.

  b. identifying potential support from the private and public sectors, including support from media organizations.

  c. developing a comprehensive research agenda with priorities.

  d. using the research findings to develop guidelines for media coverage of suicide.

The Federal government should play a role in organizing and supporting this project.

PUBLIC INFORMATION CAMPAIGNS

RECOMMENDATION 6c-2

Design and evaluate a variety of public information approaches to convey helpful information about a broad range of potentially harmful or self destructive behaviors (such as drug abuse and interpersonal violence) without emphasizing suicide.

Expertise in developing public information programs should be drawn from those who have had experience with related fields of self-destructive behavior (e.g., drug abuse, drinking and driving, smoking cessation, and seatbelt use). Those who wish to mount public information campaigns should seek guidance from leaders in marketing, advertising, and related behavioral sciences. Modules should be developed to target public information messages to specific high risk population, such as Native Americans, gay or lesbian youth, blacks, and Hispanics.

In addition, many existing public information programs and campaigns do not include adequate means to evaluate their effectiveness. The task of evaluating public information effectiveness will require identifying appropriate evaluative techniques and applying them, first, to existing programs and if necessary, to newly developed programs. Until careful evaluations have been conducted, future directions for public information campaigns cannot be rationally established.

Action Plan

- **Review the information that currently exists on the public information approaches to preventing self-destructive behaviors,** including evaluation measures to assess the effectiveness of these approaches.
- **Evaluate existing or planned public information campaigns on youth suicide targeted to a wide variety of sectors.**
- **Determine if important areas are lacking public information, and if so, establish model campaigns, including evaluation components.**
- **Provide consultative support, where ap-**

propriate, for developing competent evaluative components.

- **Encourage diverse private sector initiatives, such as public information campaigns sponsored by broadcast stations, and corporate support for paid broadcast spots and print advertising.**

Advice should be obtained from recognized experts in the fields of evaluation research, marketing, and advertising; recognized leaders in established public information campaigns related to self-destructive behaviors; and others who have developed model programs.

YOUTH SERVICES

DISADVANTAGED YOUTH

RECOMMENDATION 6d-1

Encourage a range of primary prevention programs, based on the head start model, directed at disadvantaged youth. Evaluate the effect of such programs on self-destructive behaviors, including youth suicide.

Educational and preventive programs started early in life have positive social effects. Head Start, designed to serve pre-kindergarten-age, disadvantaged children, is an example of such a program. Head Start provides stimulating educational experiences for its pupils as well as medical, dental, and psychological screening. It also involves family members in its program and provides social services, as needed, to children and their families. Unless these programs are extended to older age groups, however, the effects tend to dissipate as the children grow up.

Teachers involved in these programs are in an excellent position to identify and help young people who show signs of behavior that might affect future school performance, for example, overly aggressive children or children who lack communication skills. While program leaders should be aware of the dangers of labelling a child too early in life, they must ensure that risk factors are recognized and handled appropriately.

Action Plan

- **Develop linkages with community resources** that can provide mental health services; train program administrators and teachers to identify youth at risk of suicide and refer those children to appropriate sources of help.
- **Extend the Head Start-type exposure to older children** to sustain the gains made in the Head Start program. Federally-funded evaluations have found this to be effective.

These steps should be implemented by educational, medical, psychological, and social services and by DHHS.

SOCIALLY ISOLATED YOUTH

RECOMMENDATION 6d-2

Encourage the development of organizations and programs that integrate youth who have multiple risk factors into a social network.

Many suicidal youth tend to be lonely, isolated, and withdrawn with few social support systems. For many, a traditional family structure no longer exists. Gay youth face rejection and abuse from family members and other youth and are often unwelcome in youth groups or recreational activities. For whatever reason, some youth avoid or are systematically excluded from group activitities. Efforts to integrate these high risk young people into the mainstream may ameliorate the risk of suicide. Examples of such organizations include: scouting and 4-H clubs, youth counseling or support services, youth hotline services, school "big brother"

programs for new students, and other social groups that can assist youngsters in meeting other young people and in developing relational skills. Specialized groups may be required to fulfill specific needs for some groups of young people.

Action Plan

- **End discrimination against youths on the basis of such characteristics as disability, sexual orientation, and financial status.**
- **Enlist adult group leaders who reflect the population of youth served.** Leaders of social support groups or recreational activities often function as role models to the young people they serve.
- **Clarify the term "peer counseling."** It is generally thought that adolescents are not equipped to be bona fide counselors; a better phrase might be "peer support." Because there is evidence that peers can influence others in preventing behaviors such as alcohol and drug use, peer influence should be studied with regard to youth suicide. Appropriate peer support should include teaching youngsters how to recognize behaviors that should be brought to the attention of adults.
- **Encourage meaningful involvement of students in planning school and community programs that are for their own benefit.**
- **Establish and/or strengthen support groups that assist young people who particularly need to acquire coping skills and develop peer supports.**

These steps should be implemented by school systems, other youth-oriented organizations (4-H clubs, Scouts) and advocacy groups.

UNDERSERVED YOUTH

RECOMMENDATION 6d-3

Develop programs specifically aimed at youth with multiple risk factors who fall outside the range of traditional programs. The programs most likely to be effective are those focused specifically on youths at highest risk.

Youths at risk for suicide are an underserved population. For the most part, existing community services directed at a range of problems (e.g., mental health, alcoholism, homelessness, crisis intervention) do not have components specifically related to the problems of young people, nor are service providers adequately prepared for dealing with suicidal adolescents. Further, many young people at highest risk for suicide--youth who are homeless, runaways, physically or sexually abused, prostitutes, substance abusers, or incarcerated--fall outside the traditional services and supports offered to adolescents through schools, mental health systems, primary health care services, or traditional youth groups. Specialized programs are needed to reach and serve them.

Action Plan

- **Conduct a survey of youth who have multiple risk factors for suicide to help characterize this group and assess the best ways to reach them.** Survey the availability of resources and services to meet the needs of these young people.
- **Assess the effectiveness of interventions such as hot lines, suicide prevention centers, and drop-in programs in serving these youth.**
- **Expand programs for independent living for high-risk youth.**
- **Facilitate the transfer of information and knowledge by those already providing such services. For example, several**

runaway shelters have developed information packages and protocols in youth suicide prevention. This expertise should be made available to other service providers such as community and migrant health centers or family planning centers.

These steps should be implemented by existing programs and networks, and by professionals in the fields of health, mental health, drug and alcoholism counseling, social services, and probation.

RELIGION

RECOMMENDATION 6e.

Educate religious counselors about indicators of suicidal risk, prevention techniques, and ways to facilitate young people's access to mental health, social, and medical services when they are needed.

Religion, along with the family, are social contexts in which people are emotionally and psychologically bonded. Religious commitment focuses on strong family ties and may provide protection from suicide by promoting shared values, strong social interaction, and supportive connections with other people. Many suicidal or distraught young people contact religious counselors at times of distress.

Action Plan

- **Encourage all denominations to develop guidelines to identify and respond to youth at risk for suicide.**
- **Encourage all denominations to provide training** for religious counselors in identifying, counseling, and referring high risk youth to appropriate help.
- **Encourage linkage between religious counselors and mental health resources** by supporting educational conferences, providing consultative services, and developing mutual guidelines for communication about clients held in common.
- **Explore issues of privileged communication.**

These steps should be implemented by pastoral/religious organizations in consultation with mental health professionals. On a national level, organizations such as the National Conference of Christians and Jews might invite the National Organization of Social Workers to make a presentation on training and guidelines. On a community level, local pastoral organizations should collaborate with public health and mental health agencies in addressing this issue.

LEGAL AND POLITICAL CHANGES

RECOMMENDATION 6f-1

Explore ways that are legal and legislatively feasible to limit the access of youth at high risk of suicide to the lethal means of suicide and study the effectiveness of these interventions.

The majority of suicides among young people are committed with firearms. Since many suicides are impulsive acts, it is possible that if access to firearms were restricted, the suicidal impulse might pass and the suicide be prevented. Some evidence suggests that control of a prevalent means of suicide may influence the overall frequency of suicide. Research has shown that in States or jurisdictions where handguns are strictly controlled, fewer adolescent suicide deaths are reported.

Action Plan

- **Limit access to bridges and high buildings** from which young people are likely to jump to their death. (Jumping is the leading cause of suicide in New York

City.

- **Limit access to firearms** through legislative approaches and enforcement of current laws. Concomitantly, explore educational approaches that promote safe storage of legally-owned firearms (in locked cabinets, with ammunition stored separately).
- **Limit the number of pills and dosage of potentially lethal medications that could be filled in a single visit to the pharmacy.**

LIABILITY CONCERNS

RECOMMENDATION 6f-2

Offer adequate malpractice insurance to mental health professionals to keep concerns about liability from inhibiting the provision of services to suicidal youth.

Often, the suicide of a person under treatment is followed by a lawsuit against the clinician, alleging negligence. For some clinicians, malpractice insurance against such lawsuits in appropriate amounts is almost impossible to obtain. As a result, since mental health practitioners know that suicides do occur, even with correct therapy, some service providers are reluctant to assume the risk of liability and might avoid treating suicidal youth.

Action Plan

- **Action by legislative or regulatory bodies should be taken to make adequate insurance available to mental health professionals.**
- **Require mental health professionals to study ways of identifying and treating suicidal individuals as part of a continuing professional education requirement for license renewal.**

CRIMINAL JUSTICE AND JUVENILE JUSTICE SYSTEMS

RECOMMENDATION 6g.

Survey and assess existing mental health services in jails, prisons, and correctional institutions for their ability to identify and adequately treat suicidal individuals.

A first time arrest, especially if one is intoxicated, using drugs, or mentally ill, places a young person at particularly high risk of suicide. These young persons at high risk should be evaluated by a mental health professional to determine whether the young person should be incarcerated or hospitalized. If incarceration is judged to be appropriate, they should be observed frequently in a "safe cell" without access to means of suicide.

The existing mental health services for individuals in correctional institutions need to be evaluated, including services provided by law enforcement and correctional personnel. Better data is needed to determine how well these institutions identify suicidal individuals. Model programs cannot be recommended until the efficacy of existing programs has been evaluated.

Action Plan

- **Survey correctional institutions for existing programs that identify potentially suicidal persons and evaluate the effectiveness of these programs.**

This recommendation should be carried out by researchers in the fields of public health and mental health in cooperation with criminologists.

SOCIAL SERVICES

RECOMMENDATION 6h.

Encourage states to coordinate public and private sector activities in developing comprehensive, preventive approaches for families with youth at high risk for suicide, substance abuse, and interpersonal violence.

Encourage use of social services by families and youth at high risk for suicide.

The States are the key level of government for planning and allocating resources for social services to troubled youth and their families. The focus of State social service programs should be broad, covering prevention of a range of dysfunctional and adverse behaviors and promotion of competent families.

In establishing social service programs, broad coalitions of public and private organizations and interest groups should be included. Programs should also be community-based and designed to be culturally relevant to the particular community.

Action Plan

- **DHHS should encourage State officials to take up the challenge of developing a planning mechanism for prevention efforts aimed at supporting families with youth at high risk for self-destructive behaviors including suicide.**
- **DHHS should encourage national associations of professionals and other interest groups to advocate a broad prevention effort in each State.**
- **In its various funding programs to States, DHHS should offer guidance to encourage coordinated youth service planning at the State and local levels.**
- **Make prevention a priority of the YOUTH 2000 initiative.**
- **DHHS should fund, through its special service programs, demonstration projects in communities to test approaches to broad-based prevention activities.**

These steps should be implemented by DHHS, the National Governor's Association, professional associations that deal with particular problems faced by youth, and organizations of State directors of child welfare, drug abuse, mental health, and other relevant programs.

FAMILIES

RECOMMENDATION 6i.

Survey and evaluate existing programs that strengthen families.

Explore and evaluate innovative interventions that strengthen the ability of families to support youth through life crises.

The family is the major institution of support for youth. While one likes to think of the family unit as a source of love, strength, and emotional support for developing adolescents, problems within the family system are all too common for suicidal adolescents. Whether problems stem from conflict between youth and parents or biological vulnerabilites,--mental illness, alcoholism, or a family history of suicide--families strongly influence suicidal behavior.

Strong families, however, may help prevent problem behaviors among children. Teaching parents skills in coping, stress management, parenting, communication, and mutual support will help strengthen family ties and prevent many problem behaviors, including the kinds of alienation that lead to self-destructive behavior. Training in coping skills may be most effective at times of life

crises such as birth, death, divorce, unemployment, or serious illness in the family.

Programs and educational materials to help parents be more effective are available from many sources and are frequently sponsored by community groups: schools, churches, local mental health organizations, advocacy groups, and other community organizations whose programs are usually publicized in local newspapers. National support and advocacy groups have been formed around problems such as mental illness and drug abuse. The National Institute of Mental Health publishes education materials for parents on various topics, including preventing problems with adolescents.

Action Plan

- **Encourage professional associations that address specific problems to develop family prevention materials and educate members about these preventive approaches.**
- **As part of local community planning processes, identify or establish appropriate community resources to develop educational materials for families.** Some areas to cover include: educating families to refrain from the use of alcohol or drugs during times of stress, anger, or mood swings; providing information for families of patients with psychiatric illness; helping families understand, accept, support, and care for homosexual young persons in the family. Because families play a significant role in preventing substance abuse and other high risk behaviors among their children, they need to be educated and understand the consequences of drug abuse.
- **Promote dissemination of existing models of family support and education programs.**

These steps should be implemented by professional associations of social workers, public health nurses, youth workers, family counselors; public interest groups that relate to local communities; and organizations that address numerous youth and family problems.

SUMMARIES OF THE NATIONAL CONFERENCES

NATIONAL CONFERENCE ON RISK FACTORS FOR YOUTH SUICIDE

The first goal of the Task Force on Youth Suicide as stated by the Secretary was "to take the lead in coordinating activities about suicide among various Federal agencies, Congress, State and local governments, private agencies, and professional organizations." The three work groups of the task force--risk factors, interventions and prevention, and strategies for the future--have worked toward establishing a model for the kind of coordination and sequential progress envisioned by the Secretary. The research conclusions and recommendations reached by the Risk Factors Work Group build on this foundation.

Another major charge to the task force was to "assess and consolidate current information." The work group generated a comprehensive list of potential risk factors, grouped them into specific risk factor domains, and identified experts in each area to review the scientific literature and write summary papers. In their papers, the commissioned authors were asked to catalog, analyze, and synthesize the literature on factors linked to youth suicide. These papers clarified the environmental, behavioral, socio-cultural, biological, and psychological factors which have been associated with an increased likelihood of suicide among young people. The papers were presented at the National Conference on Risk Factors for Youth Suicide in Bethesda, Maryland, May 8 and 9, 1986. They were critiqued by a review panel and opened for discussion and comment by those attending the conference. The following comments were distilled from three sources: the commissioned papers, the review panel's work, and the reflections of the conference attendees.

Although research reviewed by the authors varied in quality as well as methodology, sufficient data were available to establish many characteristics as risk factors for youth suicide. Those biochemical, psychological, and social factors most clearly linked to youth suicide were the following:

- Substance abuse, both chronic and acute, in the context of the suicidal act. Substance abuse was also tied to the exacerbation of concurrent psychiatric disorders, themselves indicators of increased risk.
- Specific psychiatric diagnostic groups--affective disorders, schizophrenia, and borderline personality disorders.
- Parental loss and family disruption.
- Familial characteristics including genetic traits such as predisposition to affective illness and the effects of role modeling.
- Low concentrations of the serotonin metabolite, 5-hydroxyindoleacetic acid (5-HIAA), and the dopamine metabolite homovanillic acid (HVA) in the cerebrospinal fluid.
- Other risk factors include homosexuality, being a friend or family member of a suicide victim, rapid socio-cultural change, a history of previous suicidal behavior, impulsiveness and aggressiveness, media emphasis on suicide, and ready access to lethal methods, such as guns.

Cohorts born since World War II, the so called "baby boomers," have been observed

to have an earlier age of onset for depressive disorders and more frequent episodes of illness. They have shown an increase in a constellation of serious public health problems including homicide, unintentional death, alcohol abuse, substance abuse, and affective disorders. Understanding the relationship of youth suicide to this matrix would be enlightening. Also addressed was the issue of diagnostic comorbidity in individuals in whom, for example, affective disorder and conduct disorder may combine to increase risk for suicide, as one disorder complicates the other.

The diversity of risk factors points to the need for targeting intervention and prevention strategies. Our ability to address specific populations at high risk for youth suicide will help focus research and evaluation components of planned interventions as well.

While clear trends were evident, the available research made quantifiable estimates of relative risk a goal as yet unreached. Many studies, while meticulously descriptive, lacked comparison groups. Other lines of research had not been conducted for youth and results were extrapolated from adult populations.

Recommendations for future research approaches were derived from the authors' assessments of the studies that had been done in each risk factor domain. The types of research envisioned by the work group would parallel other efforts at suicide prevention and promote a more precise identification of those young people likely to benefit from a particular intervention and of the circumstances under which directed interventions are most imperative.

Efforts to study nonclinical populations were encouraged. The factors which bring a young person to treatment for substance abuse, for example, may include suicidal behavior and depression. The co-occurrence of these risk factors makes the individual more likely to be in treatment and be represented in a sample taken from a clinical population. This creates a bias that may lead to overestimating the relationship of any of these risk factors to suicide.

Epidemiologic methodologies, which have been well developed for other health problems, should be applied to youth suicide to provide a more reliable estimate of risk. There is a gap (which needs to be closed) between general epidemiology and psychiatric epidemiology and a need for better understanding of the relative magnitude of multiple risk factors for youth suicide and their interrelationships.

It is essential for suicide researchers to use control groups and specify operational definitions of populations and variables being studied. In addition, too many studies have made inferences about suicide from studies of suicide attempters or persons with suicidal ideation. While persons who complete suicide or have suicidal ideation are related and overlapping groups, information derived from one group does not necessarily represent the others.

Population based, longitudinal studies are necessary to determine whether a presumed risk factor for suicide is a true causal factor or only a secondary effect of another risk factor. For example, physical abuse is associated with a higher incidence of suicidal behavior. The physical abuse as well as the suicide may be behavioral responses to some other risk factor, such as a chaotic family environment.

We recognize suicide has multi-determinants, yet too often our research is isolated into separate disciplines. Educators, psychiatrists, epidemiologists, sociologists, psychologists, biologists, and theologians can enrich our understanding of youth suicide through interdisciplinary research. Such a consortium of researchers fits the nature of suicide in that the crux of suicide is the intersection of many different problems and stresses which appear so hopeless to the victim.

The authors reviewing youth suicide risk factors were struck by the paucity of research focusing on this age group. Efforts should be made to replicate the better designed adult

studies for youth. Such research could establish whether some of the inferences drawn from adult research are appropriate for youth. For example, depression is a very common antecedent to suicide in adults but may be somewhat less frequently associated with youth suicide. Ongoing work with adult suicide should be extended to include children and younger adults. For instance, efforts might be directed to include younger subjects in brain and cerebrospinal fluid studies.

Translating the identified risk factors into early detection of potential youth suicides remains an enormous task. Risk assessment measures are needed that integrate and weigh the panoply of identified risk factors. These might be validated through psychological autopsy studies of youth suicides as well as through prospective studies. The goal of such risk assessment measures is to identify young people at highest risk so that intensive and specific therapeutic interventions may be offered.

From the risk factors point of view, determining the value of a proposed intervention or prevention effort involves six considerations:

1. How prevalent is the identified risk factor or constellation of factors in the population? If, for example, persons with affective disorder combined with a family history of suicide have been identified as high risk individuals, what proportion of young people fit this description? What is the magnitude of the population that might potentially benefit from an intervention directed towards an identified group?
2. How strong a risk factor or risk factor pattern does that group carry? While each suicide is a grievous loss, we end up having to make choices among interventions based on finite resources. More suicides might be prevented if interventions could be directed toward groups at especially high risk.
3. How readily can we reach the individuals with identified risk factors? Will persons with these risk factors present themselves for help if they know it is available? Or are they accessible only through elaborate and costly screening programs? Is the nature of the risk factor, for example, child abuse or incest, one that the family denies and conceals rather than recognizes as a reason for treatment?
4. How receptive to an intervention will the persons at risk be? How acceptable is it to them? Will they view it a too costly, too time consuming, too noxious, or too burdensome in some other way? Is it culturally acceptable and perceived as likely to be beneficial?
5. How effective is the intervention? Will the best treatment of depression be effective for at least 80 percent of those treated, or are we considering a program for some other risk factor which represents the best and most advanced approach but still is only effective for 10 percent or 15 percent of those treated?
6. How can the intervention be implemented in a timely and affordable way? How can its effects be measured in terms of reduced risk for the identified population?

We see the answers to these questions as the bridge between risk factor identification, prevention planning, and implementation. We know that youth suicide is a major public health problem and the second leading cause of death for this age group. Death itself, however, is infrequent among young people and suicide claims about 1 in 10,000 youths. Thus, we need to look at the benefits of addressing particular risk factors more broadly than suicide prevention alone. An intensive effort at detection of depression among young people and reeducation of mental health professionals to provide more effective treatment might accrue many benefits for the young people affected in addition to the possible prevention of suicide. Peer counseling programs or affective education in the schools might reduce the risk of suicide in this impulsive age group and might also en-

hance communication skills or reduce disruptive school behavior. We need to be clear about the risk factors being addressed by a particular intervention, and to evaluate the many related positive outcomes that derive from our suicide intervention efforts. We believe that understanding risk factors for youth suicide is an essential and broad foundation upon which an array of vigorous prevention activities will be built. Our task is to provide a sturdy foundation of careful research and fit the prevention and implementation structure to its base. Its design and construction will represent our most enlightened commitment to stop this tragic loss of life.

NATIONAL CONFERENCE ON PREVENTION AND INTERVENTIONS IN YOUTH SUICIDE

The National Conference on Prevention and Interventions in Youth Suicide was held on June 11 to 13, 1986 in Oakland, California. Bringing the conference to the West Coast gave many interested people in that part of the country an opportunity to participate and exchange views with the experts. Approximately 25 papers commissioned by the task force were presented during two and a half days of lively presentations, workshops, and debate.

The Prevention and Intervention Work Group was charged with investigating and presenting the current knowledge in prevention and intervention strategies that have and have not worked. The members of the task force and the participants at the Conference on Prevention and Interventions have done much to advance this goal. The conference brought together representatives of the lay and professional communities, fostered a dialogue between them, and developed recommendations for future action.

When we try to answer the questions, "What has caused the increase in suicide among youth?" and "Why do young people kill themselves?", a combination of factors appear to be contributory. Much has been learned from psychological autopsies--biographies obtained from interviewing persons close to the suicide victim that reveal information about the psychological state of the victim during the period before the suicide. Most youngsters exhibit recognizable signs that might be classified as "reaching out for help." Previous attempts at suicide are the most obvious cries for help, but only about half of the young suicide victims have been known to try before, suggesting that other early indicators predictive of suicidal behavior must be systematically compiled. One indicator that appears consistently is drug abuse, which rose strikingly among this age group during the same decade in which suicide rose. Alcohol and drug abuse often complicates and sometimes precipitates suicidal behavior. Alcoholism and depression, not only among youth, but among their families, are also risk factors. So too, are sexual identity problems that often have serious psychosocial consequences for a young person. Few studies have focused on minority populations; data that do exist suggest that acculturation, socioeconomic status, and education may play a role in the etiology of suicide among these groups.

There is recent evidence suggesting that television may influence suicidal behavior among susceptible youth. This is clearly an area to be explored more fully since television is a ubiquitous influence on adolescents. In fact, programs and advertisements may depict suicides in simplistic and unreal terms.

Strategies for identifying risk factors and understanding the interrelationship of various risk factors are necessary for designing, implementing, and evaluating approaches for prevention, early detection, and treatment. Models of suicidal behavior among youth must recognize all theoretical and clinical viewpoints. For example, one view sees the successful suicide as the culmination of processes that begins with some problem early in life and progressing along a continuum through suicidal thoughts, attempts

at suicide, and finally, success. Another view sees those who attempt suicide and those who complete suicide as two distinct, although overlapping groups. Intervention for the first group might require broad-based primary prevention efforts at an early point in the continuum; the second group might benefit more from interventions aimed at smaller groups of young people whose characteristics place them at increased risk of completing suicide. Screening the former group for suicidal risk might require an extremely large cohort and involve great expense. Preventive efforts for the latter group may entail a more stringent identification of risk factors and might run the risk of missing a certain number of "hidden" potential suicides in the population. In reconciling the various points of view, it might be noted that applying primary preventive interventions to large populations, even including youth at low risk, can be beneficial in generating better mental health for all children.

Numerous community-based prevention and intervention programs have sprung up quickly since the 1970s. Little, however, is known about their effectiveness. We need to know more about what kinds of interventions work, for whom, and under what circumstances; and we need to know the optimal timing for an intervention within a young person's developmental stages. Psychotherapeutic and pharmacotherapeutic approaches need to be evaluated for their effectiveness in children. Studies evaluating the effectiveness and costs of interventions to prevent youth suicide are needed. We need systematically collected data on the effectiveness of telephone hotlines, school-based intervention and education programs, suicide prevention centers, peer support groups, counseling of runaways, and programs to limit access to the lethal means of suicide by high risk youth.

Although the school setting appears to be an accessible place in which to identify and refer potentially suicidal youth at an early stage, it is equally important to examine the role of schools in preventing youth suicide by providing counseling and education for the peers of a suicide victim to help them cope with the psychological aftereffects of another's untimely death.

The design and evaluation of preventive services depend, to a large degree, on valid and reliable etiologic and epidemiologic data on suicides and suicide attempts collected at the State and local level. Accurate data permit us to identify risk factors and measure trends. From there, professionals can plan appropriate interventions tailored to meet specific needs of potentially suicidal young people or the survivors of a suicide. Work is proceeding on these topics among researchers outside the Federal government and in various Federal agencies such as the Centers for Disease Control and the Alcohol, Drug Abuse, and Mental Health Administration.

Suicide prevention activities will probably work best when administered at the community level. They should be broad-based to include families, individuals, schools, communities, medical care settings, and workplaces. Activities should be integrated into existing programs that address a wide range of self-destructive or problem behaviors among youth. Similarly, public education should not focus solely on suicidal behavior, but should address related problems such as substance abuse, interpersonal violence, and unwanted teenage pregnancies. We must continue to disseminate our current knowledge in prevention, diagnosis, and treatment of suicide among the young to the public, the media, and health service providers. Removing the stigma associated with alcohol, drug abuse, and mental health treatment should be another goal of education.

Personnel in health care facilities, especially hospital emergency rooms where troubled or injured young people might go for treatment, should be trained in suicide risk assessment and be knowledgeable about appropriate diagnosis and referrals. Failure to investigate the psychological state of the patient

or the events that precipitated the injury may result in overlooking a suicide attempt.

We know without doubt that many of the precursors to suicide among youth can be treated and many suicides prevented. Suicide has many different causes and occurs among young people from many different backgrounds, who, in turn, can be helped by many different types of services. Success in suicide prevention, then, will require the combined efforts of Federal, State, and local governments working together with all sectors of society, including religious leaders, businesses, educators, health care providers, individuals, community and family volunteers looking broadly at prevention of risk-taking and self-destructive behaviors.

NATIONAL CONFERENCE ON STRATEGIES FOR THE PREVENTION OF YOUTH SUICIDE

The Work Group on Strategies For the Future had four objectives. The first objective was to review the findings of the two work groups on risk factors and prevention; use these findings to construct a variety of youth suicide prevention strategies by targeting specific interventions to subpopulations with specific risk factors; evaluate these strategies in terms of cost and effectiveness; and finally, recommend the most appropriate and cost-effective strategies.

The second objective was to present a comprehensive set of recommendations to the Secretary that would address the most urgent needs for research and prevention; reflect input from a diverse set of disciplines, interest groups, and experts in the field; be clear, practical, and few in number; address ways of including many different sectors, such as business, education, health, and mental health; and not require a large expenditure of government funds.

The third objective was to develop an implementation plan to indicate how a wide range of sectors and organizations could be active participants in implementing the recommendations. These sectors included government and nongovernment groups in public health, mental health, health services, education, business and philanthropy, media (including entertainment), criminal justice and legal systems, religion, social services, and family.

Finally, the fourth objective was to build a consensus in the suicide prevention community by using the process of developing the recommendations to bring together separate sources of support: the suicide prevention centers and the medical community; lay persons and health professionals; practitioners and researchers; researchers with a biological perspective and researchers with a psychosocial perspective.

Commissioned Papers

The work group commissioned 11 papers to help develop strategies and recommendations. Margaret Gerteis, Ph.D., a health services historian, presented a paper entitled, "The Federal Role in Youth Suicide Research and Programs: The Legacy of Recent History." She discussed the successes and failures of past Federal approaches to youth suicide prevention, the individuals and institutions that play major roles in today's youth suicide prevention efforts, and the institutional constraints, strengths, and weaknesses that exist. She concluded that support for youth suicide research is weaker than it might be because there is no unified advocacy for it. There is a need, however, for integrated, collaborative, multidisciplinary research, and a need for reliable and sustained funding for such research.

David Eddy, M.D., Ph.D., a health policy analyst skilled in quantitative decision analysis and Robert Wolpert, Ph.D., a mathematician examined the effects of various interventions to prevent youth suicide and identified prevention efforts that might be most effective. Their paper entitled "Estimating the Effectiveness of Interventions to Prevent Youth Suicide," described a model to analyze the effectiveness of six interventions for decreasing youth suicide in the United States. They used a questionnaire to solicit the subjective estimates of ex-

perts about factors that determine the effectiveness of those interventions. The interventions they examined are (1) affective education, to help youth understand and cope with the types of problems that can lead to suicide; (2) early identification and treatment of youths at high risk of committing suicide; (3) school-based screening programs; (4) crisis centers and hotlines; (5) improved training of health care professionals in the treatment of conditions that can lead to suicide; and (6) restricting access to the lethal means of suicide--firearms, medications, and high places. The exercise indicated that a wide range of uncertainty exists about the effectiveness of each intervention, with the range of uncertainty among experts about any particular intervention exceeding the differences between the best estimates for each intervention. The exercise also indicated that no intervention, or even the combination of all six interventions, could be considered a "cure" for youth suicides. Additional empirical research is greatly needed on the factors that determine the effectiveness of youth suicide prevention programs, and for careful analysis, before large-scale programs are launched. Given the urgent need for the youth suicide program, Eddy and Wolpert recommend a strategy of (1) analyzing the available information, (2) conducting short-term research to gather empirical data for estimating both the effectiveness and costs of different intervention, (3) analyzing the results of that research to set preliminary priorities, (4) designing pilot projects to evaluate the most promising interventions, and (5) planning large-scale interventions based on the evaluation of the pilot projects.

Epidemiological studies of suicide attempts, suicide attempters, frequency of attempts, and the relationship between suicide attempts and completed suicides were reported in two papers. Eve Mościcki Sc.D., M.P.H., Patrick O'Carroll, M.D., M.P.H., Donald Rae, M.A., et al. analyzed data about the prevalence and characteristics of youth suicide attempts derived from the Epidemiologic Catchment Area Study. Lee Robins, Ph.D., examined data from a survey of adolescents attending a community health center clinic. These studies showed the prevalence of suicide attempts to be about 2.9 percent. In addition, the people at highest risk of considering or attempting suicide were females aged 25 to 44 years, separated or divorced persons, whites, and persons of lower socioeconomic status. Persons with a diagnosis of a psychiatric disorder were more likely to have either thought about suicide or attempted suicide than were persons with no psychiatric diagnosis.

The work group asked an economist and a policy analyst to see how much youth suicides and suicide attempts cost. In their paper, "Economic Impact of Youth Suicides and Suicide Attempts," Milton Weinstein, Ph.D. and Pedro Saturno, M.D., M.P.H. estimated that the annual cost is about $2.3 billion.

The work group also wanted to assess the state of the art in developing a screening instrument to identify young people at greatest risk. Robert Yufit, Ph.D. concluded that we need an instrument that is sensitive, specific, short, easy to administer, and interpretable by nonprofessionals. We do not, however, yet have it.

Finally, the authors of five separate papers examined present and needed efforts in a variety of sectors to prevent youth suicide. The sectors included health services (Barbara Starfield, M.D.), education (Edward Wynne, Ph.D.), business and philanthropy (Wendy Watson, Ph.D. and Bobbie Wunsch), social services (Jerry Silverman, Ph.D.), and media and entertainment (Alan Berman, Ph.D.).

Recommendation Development

The work group constructed preliminary recommendations by reviewing all the papers commissioned by the task force, including the papers on risk factors and prevention. In addition, recommendations were solicited from all participants at the national conferences on risk factors and prevention. More than 700 experts and participants in youth suicide

prevention attended these conferences, and more than 200 individuals submitted recommendations. From these sources, the work group compiled a set of preliminary recommendations, which were reviewed and revised by the task force. These preliminary recommendations were distributed just prior to the National Conference on Strategies for the Prevention of Youth Suicide. At a day-long invitational meeting, groups of experts in specific areas of suicide prevention worked together with representatives of more than 90 different local and national organizations that could play important roles in implementing these recommendations. Each working group was asked to rank the priority of the recommendations for their sector, list the steps essential to implementing each recommendation, identify who should do each step, and present a rough timetable and set of measurable objectives for monitoring progress on each objective. The collected set of recommendations and the implementation plan for each objective, a 120-page document, was distributed for discussion by the next day at a plenary session of the National Conference on Strategies for the Prevention of Youth Suicide. These recommendations were further refined, and the 47 recommendations discussed at the conference were combined into six final recommendations for the task force.

National Conference on Strategies for the Prevention of Youth Suicide

On November 18, 1986, in Bethesda, MD, more than 700 people attended a conference which considered the most effective strategies for preventing youth suicide and the steps necessary for implementing those strategies. The Secretary of Health and Human Services, Otis R. Bowen, M.D., emphasized the potential role of the family and community in helping to alleviate many problems of youth, including suicide. He noted that the family structure must be strengthened because it is the most important source of nurture and guidance for young people and "the single best social program we have." The task force chairman, Shervert H. Frazier, M.D., addressed the important role of the National Institute of Mental Health (NIMH) and traced the development of NIMH from its original emphasis on service and training to its current focus on mental health research. NIMH's most appropriate and productive roles, he noted, are to support basic and clinical research, design and evaluate major demonstration programs, and collaborate with service providers and their educational institutions. The Director of the Centers for Disease Control, James O. Mason, M.D., called for strong leadership by the Federal government in the area of youth suicide. This leadership should include coordinating suicide prevention efforts among all levels of government and the private sector, mobilizing resources, translating the results of research into practical applications, collecting accurate statistical data, and establishing goals and measurable objectives to track progress in suicide prevention. Margaret Gerteis, Ph.D. and David Eddy, M.D., Ph.D. reviewed the highlights of their papers, and workshop leaders summarized their recommendations for each sector. A discussion panel examined the obstacles to more effective youth suicide prevention and the resources available to overcome these obstacles. The panelists included Charlotte Ross (Youth Suicide National Center), Alfred Del Bello (National Committee to Prevent Youth Suicide), Cynthia Pfeffer, M.D. (American Association of Suicidology), James O. Mason, M.D. (Director, Centers for Disease Control), and Shervert H. Frazier, M.D. (formerly, Director of the National Institute of Mental Health).

Summary of Recommendations and Conclusions

1. Develop accurate, timely, and valid data on suicide and attempted suicide.
2. Conduct multidisciplinary research to determine and evaluate the risk factors for suicide.
3. Evaluate the effectiveness and cost of interventions to prevent suicide.

4. Support the delivery of suicide prevention services.
5. Inform and educate the public and health service providers about current knowledge in the prevention, diagnosis, and treatment of suicide among youth.
6. Involve both public and private sectors in the prevention of youth suicide.

The final recommendations represent a comprehensive and organized approach to solving the problem of youth suicide. With these recommendations, the work groups' objectives were, by and large, accomplished. Although our knowledge of how to prevent this tragic outcome is still in its infancy, the planned, consistent approach recommended by this task force should help to move this area rapidly ahead.

INVENTORY OF DHHS ACTIVITIES IN SUICIDE PREVENTION

INVENTORY OF DHHS PROGRAMS RELATING TO YOUTH SUICIDE

An inventory of research, service delivery, and education programs relating to suicide was compiled by the task force in an effort to consolidate current information within the Department of Health and Human Services and to provide needed information to organizations and individuals actively involved in suicide prevention or education activities.

Each of the agencies of DHHS was asked to provide a brief summary of ongoing initiatives that relate directly or indirectly to youth suicide. Organized according to sponsoring agency, the inventory includes program titles, names of project officers responsible for program administration, office addresses and telephone numbers (as of January 1987), and brief descriptions.

Some programs listed in the inventory do not relate directly to suicide but emphasize general health promotion issues that may be applied to suicide prevention (such as drug abuse prevention programs), or provide services that address problems related to youth suicide (such as Medicaid, which provides medical and mental health services to young people threatening or attempting suicide). Some agencies, such as the National Institutes of Health support many initiatives in the area of adolescent health, but exclude suicide from their research because it is under the domain of the National Institute of Mental Health (NIMH).

NIMH is the principal conduit for federally-supported basic research in suicide. Its mental health service component was discontinued in 1981 with the advent of block grants to States which support those services. The Administration for Children, Youth, and Families (ACYF) supports programs for runaway youth, some of which have specific suicide prevention components. The Centers for Disease Control (CDC) offers technical assistance to State and local health departments and communities where suicides have occurred and serves as the locus for gathering and analyzing data related to suicide. CDC also works to improve the identification and reporting of suicides and suicide attempts, and supports applied suicide research through its injury prevention grant program.

The following list serves as an index to the more complete program descriptions that follow.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

National Institute on Alcohol Abuse and Alcoholism
- Division of Intramural Clinical and Biological Research
- Division of Extramural Research Programs
  - Depression, Suicide, and Aggression in Alcoholics

National Institute on Drug Abuse
- Office of Science
  - Epidemiologic research
  - Prevention research
  - Treatment research
  - Health professions education
  - Public education

National Institute of Mental Health
- Intramural Research Program
  - Biological Correlates
- Division of Clinical Research
  - Epidemiologic Catchment Area
  - Suicide Consortium
- Division of Basic Sciences
  - Neuroscience Research Branch
- Division of Biometry and Applied Sciences
  - Biometric and Clinical Applications Branch
  - Antisocial and Violent Behavior Branch
  - Minority Research Resources Branch
- Office of Scientific Information
  - Medical Education Videodisc on Teenage Suicide

CENTERS FOR DISEASE CONTROL

Division of Injury Epidemiology and Control

- Technical Assistance to State and Local Health Departments
- Tracking the 1990 Objectives for Youth Suicide
- Study of Youth Suicides in Two Communities
- Study of Time-Space Clustering of Suicides
- Operational Criteria for the Determination of Suicide
- Youth Suicide Surveillance Report

National Center for Health Statistics
- Division of Vital Statistics
  - National Mortality Statistics Program
- Development of Operational Criteria for the Classification of Suicide

HEALTH CARE FINANCING ADMINISTRATION

Medicaid

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Division of Maternal and Child Health

Child and Adolescent Injury Prevention (intentional and unintentional)
Emergency Medical Services for Children and Youth
Adolescent Health Program
Adolescent Health Training
Maternal and Child Health Research
Office of Chief Psychologist
Sudden Infant Death Syndrome

INDIAN HEALTH SERVICE

Division of Clinical and Prevention Services

Mental Health Branch

OFFICE OF HUMAN DEVELOPMENT SERVICES

Administration for Children, Youth, and Families

Family and Youth Services Bureau
Computer Assisted Training in Teen Suicide Prevention for Runaway Center Staff
Preventing Suicides Among Youth Using Runaway Shelters
Suicide Prevention in Runaway Youth Centers
Runaway and Homeless Youth Suicide Prevention Training Project
Suicide Prevention and Treatment in Runaway Shelters
Suicide Prevention Program for Runaway Youth Shelters
Huckleberry House

OFFICE OF INSPECTOR GENERAL

Office of Analysis and Inspections

Youth Suicide Report
Inventory of State Initiatives in Addressing Youth Suicide

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute on Alcohol Abuse and Alcoholism

PROGRAM: Division of Intramural Clinical and Biological Research

ADDRESS: National Institute on Alcohol Abuse and Alcoholism
Building 10, Room 3B19, 9000 Rockville Pike,
Bethesda, Maryland 20892 (301)496-9705

CONTACT: Markku Linnoila, M.D., Ph.D., Clinical Director

DESCRIPTION OF ACTIVITIES:

To develop a deeper understanding of some of the risk factors for suicide and violent behaviors, a portion of this program is devoted to conducting in-depth studies on the psychobiological correlates of suicidal and violent behaviors. A successful outcome may permit us to modify some of the identified risk factors for suicide and reduce the incidence of suicide and impulsive violent crimes.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute on Alcohol Abuse and Alcoholism

PROGRAM: Division of Extramural Research Programs/Depression, Suicide, and Aggression in Alcoholics

ADDRESS: National Institute on Alcohol Abuse and Alcoholism
5600 Fishers Lane, Rockville, Maryland 20857

CONTACT: Dan Lettieri, Ph.D., (301)443-1273

DESCRIPTION OF ACTIVITIES:

This project assesses the relationships between alcohol consumption, amino acids and three types of behavior in alcoholics: aggression, depression, and suicide. Preliminary data show an association between lowered tryptophan ratios and suicide attempts, aggressive behavior, and depression. This has important therapeutic implications since tryptophan therapy may help in lessening depression, suicide attempts, and violent behavior.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute on Drug Abuse

PROGRAM: Office of Science

ADDRESS: National Institute on Drug Abuse; 5600 Fishers Lane
Rockville, Maryland 20857

CONTACT: Dorynne Czechowicz, M.D., Assistant Director for Medical and Professional Affairs, Office of Science, (301)443-0441

DESCRIPTION OF ACTIVITIES:

NIDA's programs address the broad issue of adolescent substance abuse, a problem long believed to be closely associated with suicide. NIDA's extramural research program includes epidemiology, prevention and treatment research; professional development/education, and training.

- **Epidemiologic research** includes studies on the consequences (emotional, physical, behavioral and interpersonal) of illicit drug use, drug use among American Indian youth and other minority youth, personal and social characteristics that influence drug use, national surveys to track trends and patterns in drug use among adolescents, prevalence of drug use in various age ranges, and data on drug-related morbidity and mortality in selected areas in the United States.

- **Prevention research** focuses on testing the effectiveness of a variety of methods to prevent drug use among young people, including minority populations. The studies include community action programs, health promotion curricula in schools, parenting skills training, and different therapeutic procedures for adolescents and their families in preventing drug use. Much prevention research focuses on teaching youngsters personal and social coping skills that help them resist pressures to use drugs, for example, improving self-image, decision-making, and cognitive skills building. In addition, prevention research focuses on the biopsychosocial vulnerabilities or precursors of drug abusing behavior among children and youth and the implications for preventive interventions among high risk youngsters.

- **Treatment research** includes the development of diagnostic and assessment instruments; studying comorbidities in children and youth; testing the validity of a questionnaire in predicting treatment outcome, assessing the comparative effectiveness of various types of therapy for adolescent drug users, evaluating the effectiveness of social skills training and social service aftercare for formerly jailed adolescents.

- **Health professions education** is targeted at improving medical education in substance abuse and enhancing the ability of primary care providers in early recognition and intervention in substance abuse problems and other related high risk behaviors in children and youth.

- **Public education.** NIDA has conducted several media campaigns to increase public awareness of the serious social and health consequences of drug use. These programs included cocaine public education and prevention programs, "Just Say No" to drugs campaign, and AIDS and Drug Abuse Public Education, Prevention and Outreach.

  CONTACT: Susan Lachter, Director, Office of Research Communications, NIDA, (301)443-1124.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute of Mental Health

PROGRAM: Intramural Research Program

ADDRESS: National Institute of Mental Health
9000 Rockville Pike, Building 10
Rockville, Maryland 20205

CONTACT: Gerald L. Brown, M.D., Staff Psychiatrist; Biological Psychiatry Branch
Room 4C-218, (301)496-4805

DESCRIPTION OF ACTIVITIES:

The Intramural Research Program of the Institute includes studies on possible biological markers of suicide, focusing on the relationship between biochemical factors and aggression. The Intramural Research Program also studies familial factors in suicide, integrating this with research on affective disorders. Some NIMH research in these areas is closely associated with intramural research being conducted by the National Institute on Alcohol Abuse and Alcoholism.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute of Mental Health

PROGRAM: Division of Clinical Research (DCR)

ADDRESS: National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20857

CONTACT: Eve K. Mościcki, Sc.D., M.P.H.; Assistant Chief, Epidemiology and Psychopathology Research Branch, DCR
Room 10C-05, (301)443-3774

Irma S. Lann; Head, Affective and Anxiety Disorders Program, Child and Adolescent Disorders Research Branch, DCR
Room 10-104, (301)443-5944

Arlene P. Hegg, M.D.; Head, Suicide and Suicidal Behavior Program, Mood, Affective , and Personality Disorders Research Branch, DCR
Room 10C-24, (301)443-4524

DESCRIPTION OF ACTIVITIES:

- **Grants.**

  DCR currently supports several epidemiologic and clinical studies in the area of suicide. The grants either focus specifically on youth suicide, contain a substantial suicide component, or study young people under the age of 25. Other grants will collect data on young suicide attempters and completers, their families; and will study suicidal ideation in children. An Institute-wide program announcement soliciting high quality applications in suicide research has been issued to the field.

- **Epidemiologic Catchment Area (ECA).**

  The core data from the ECA contain information on suicide ideation and suicide attempts. These data are currently being analyzed in-house for information on suicide ideators and attempters, with focus on the 18-24 year olds. Results of these analyses will be disseminated to the field.

- **DCR Suicide Consortium.**

  This group was formed to coordinate suicide research efforts within the Division. The consortium includes members from other Divisions of NIMH.

PLANNED ACTIVITIES:

- **Grants.**

  Areas planned for investigation include psychological autopsies of young suicide completers, followup studies of adolescents in the community who have anxiety, affective, and conduct disorders, studies of violence in young schizophrenic patients, studies of biochemical aspects of suicidal behavior, prospective studies of populations that experienced disasters, followup studies of psychiatric patients, treatment studies, and refinement of methodologies in both clinical and epidemiologic studies of suicide.

- **Coding system for grant applications on suicide.**

  DCR is developing a coding system so that it can provide systematic information on the focus of its research, the investigators, the populations studied, and trend data for grants.

- **Suicide information and technical assistance.**

  DCR is planning to coordinate the collection of scientific literature and publications on suicide and suicidal behavior; establish a central repository for this information in DCR as a basis and permanent resource for staff consultation, technical assistance, recommendations for research, and research activities.

- **NHANES-III.**

  NIMH will participate in the NCHS-sponsored Third National Health and Nutrition Examination Survey (NHANES-III). One important objective of our participation is to obtain, for the first time, an estimate of the prevalence of suicidal ideation and attempts in a national sample of the U.S. population. The structure of the survey will permit long-term followup of suicide ideators and attempters, as well as persons with psychiatric disorders, to determine which of them die by suicide.

- **Other.**

  DCR will continue its sponsorship of workshops and symposia to discuss research issues. A workshop was held in April 1987 to address common problems and issues in research methodology with emphasis on developing a common core of assessment tools and standardizing terminology (e.g., suicide versus attempted suicide).

  Similar workshops and symposia will keep the field abreast of developments in research which can be used to develop and improve treatment and prevention programs.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTHADMINISTRATION
National Institute of Mental Health

PROGRAM: Division of Basic Sciences

ADDRESS: National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20857

CONTACT: Steven J. Zalcman, M.D., Neuroscience Research Branch,
Room 11-105, (301)443-3948.

DESCRIPTION OF ACTIVITIES:

The Neurosciences Research Branch supports research in the basic neurosciences (neurobiology, psychopharmacology, and biobehavior) as they relate to the etiology, pathogenesis and pathophysiology of neuropsychiatric disorders. The current grant portfolio supports investigators studying various neurochemical correlates of suicide. In addition, the branch supports two brain banks which provide post mortem tissue from suicide victims to investigators studying anatomy, pharmacology, neurochemistry and molecular biology.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute of Mental Health

PROGRAM: Division of Biometry and Applied Sciences

ADDRESS: National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20857

DESCRIPTION OF ACTIVITIES:

The Division of Biometry and Applied Sciences supports research on service delivery within the mental health system; the provision of mental health services in other types of health care settings; economic factors influencing supply, demand, and costs of mental health services; mental health issues and problems related to antisocial and violent behavior, rape and sexual assault, and law and mental health interactions; and mental health status and mental health services for minority populations.

Three branches of the division support research grants:

- **The Biometric and Clinical Applications Branch** supports research on mental health services delivery and health economics at the clinical, institutional, and systems levels in specialty mental health and general health settings; and the evaluation of interventions to improve clinical practice. Major program emphases include economic issues in mental health services delivery, mental health services within the primary medical care sector, and the special service needs of particular population groups such as the seriously mentally ill and minorities.

  CONTACT: Services, primary care, and economics research: Kelly J. Kelleher, M.D., M.P.H., Room 18C-14, (301)443-3364.

- **The Antisocial and Violent Behavior Branch** supports research on antisocial behavior, individual violent behavior, rape and other sexual assaults, and law and mental health interactions. The scope of the branch's program encompasses biological and behavioral sciences and psychosocial and empirical legal studies.

  CONTACT: Antisocial and violent behavior research: Saleem A. Shah, Ph.D., Room 18-105, (301)443-3728.

- **The Minority Research Resources Branch** provides support through the small grant mechanism for research on mental health issues specifically related to Asian Americans and Pacific Islanders, Blacks, Hispanics, and American Indians/Alaskan Natives. Support programs of the branch are principally intended for new investigators, those at small colleges and historically black colleges and universities, and others who do not have regular research grant support available from their own institutions.

  Studies on various aspects of suicide are appropriate in several of these programs. These include relevant studies of service delivery in the specialty mental health and general health sectors, suicide in minority groups, and costs and financing of suicide services.

  CONTACT: Minority research: Freda K. Cheung, Ph.D., Room 18-101, (301)443-3724.

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION
National Institute of Mental Health

PROGRAM: Office of Scientific Information
Medical Education Videodisc on Teenage Suicide

ADDRESS: National Institute of Mental Health
5600 Fishers Lane
Rockville, Maryland 20857

CONTACT: Carrie Lee Rothgeb, Deputy Director,
Room 15-105, (301)443-3600

DESCRIPTION OF ACTIVITIES:

NIMH, in collaboration with the National Library of Medicine, developed a curriculum presented on videodisc for use in medical schools. The curriculum entitled, "Suicide Intervention: Assessing Teenagers at Risk" teaches medical students to recognize a potentially suicidal adolescent and to know how and when to refer the youth to a mental health practitioner for treatment. Students watch cases on a video screen, refer to a written computer text, and use the computer keyboard to guide themselves through the program.

PLANNED ACTIVITIES:

Books, manuals, and other written material are being prepared from the videodisc script to enable a broader audience to use the learning curriculum.

CENTERS FOR DISEASE CONTROL

PROGRAM: Division of Injury Epidemiology and Control/Center for Environmental Health

ADDRESS: 1600 Clifton Road; Atlanta, Georgia 30333

CONTACT: James A. Mercy, Ph.D., (404)488-4646

DESCRIPTION OF ACTIVITIES:

The Division of Injury Epidemiology and Control directs its efforts to preventing deaths and nonfatal injuries due to self-directed violence by:

- Improving scientific understanding of the patterns and causes of self-directed violence through descriptive and analytic epidemiology.
- Developing and improving methods and implementing model projects for the collection of surveillance data on self-directed violence.
- Exploring and developing research methods for the epidemiologic study of self-directed violence and the evaluation of suicide prevention/intervention strategies.
- Developing and evaluating suicide prevention/intervention strategies.
- Providing expertise and disseminating information on self-directed violence to State and local health departments, schools of public health, professional audiences, and practitioners in the field.

The Division's activities directly related to youth suicide are:

- **Assistance to State and Local Health Departments**

  CDC provides epidemiologic assistance to State and local health departments in responding to, preventing, and analyzing suicide clusters and other unusual patterns in the occurrence of suicide. During the past 3 years CDC has provided direct assistance to State health departments for apparent clusters of suicide and suicide attempts.

- **Tracking the 1990 Objectives**

  CDC has been tracking progress towards the 1990 Objective to reduce the youth suicide rate to below 11 per 100,000 (In 1978, the suicide rate for this age group was 12.4 per 100,000). CDC will continue to monitor progress towards this objective and disseminate these results through the Morbidity and Mortality Weekly Report and other avenues.

- **Study of Youth Suicides in Two Communities**

  This is a case-control analysis of two suicide clusters among teenagers in 2 Southwestern communities. The objectives of the study are to characterize those teens at highest risk for suicide in a cluster and document details of the behaviors and events which led to their deaths. Under a cooperative agreement, the State department of mental health gathered the psychological autopsy data and information through interviews using a computerized questionnaire and created a data tape.

- **A Study of Time-Space Clustering of Suicides**

  This is a contract agreement with the New York State Psychiatric Institute to accomplish the following objectives:

  – review the statistical techniques for detecting time and space clustering,

  – identify the population-based mortality data sets for study,

- develop a computer program to detect suicide clusters,
- revise the statistical model using simulation and actual data,
- use the model to estimate the magnitude of suicide clustering and the characteristics of the potential clusters detected, and
- develop surveillance strategies for clusters based on the information gained from the model.

- **Operational Criteria for the Determination of Suicide (OCDS)**

  Individuals representing organizations involved in the compilation, analysis, and utilization of suicide statistics developed specific, operational criteria for the determination of deaths as suicides. The criteria will promote complete reporting and accurate determination of suicides on death certificates. The organizations involved on the working group for this project included the Academy of Forensic Sciences, American Association of Suicidology, Association for Vital Records and Health Statistics, Centers for Disease Control, International Association of Coroners and Medical Examiners, National Association of Medical Examiners, and the National Center for Health Statistics.

- **Youth Suicide Surveillance Report**

  This report entitled, "Youth Suicide in the United States, 1970-1980", partially supported by NIMH, analyzes vital statistics data on suicide deaths among youth (ages 15 to 24) in the United States for the periods 1970 to 1980. It is intended for use by clinicians, health planners and evaluators, and other public health officials interested in the number and characteristics of youth suicide.

CENTERS FOR DISEASE CONTROL

PROGRAM: National Center for Health Statistics
Division of Vital Statistics

ADDRESS: 3700 East-West Highway
Room 1-44
Hyattsville, Maryland 20782

DESCRIPTION OF ACTIVITIES:

The Division of Vital Statistics includes two activities related to youth suicide.

- **National Mortality Statistics Program** produces, and analyzes suicide data as reported on the death certificates filed in the States and in other vital registration areas, which are reported to the National Center for Health Statistics through the Vital Statistics Cooperative Program. Cause-of-death data reported on the death certificate, including suicide, are classified and tabulated in accordance with standards of the World Health Organization embodied in successive revisions of the International Classification of Diseases.

  These NCHS data are published monthly on a provisional basis in the *Monthly Vital Statistics Report,* and annually on a final basis in *Vital Statistics of the United States, Volume II, Mortality*. The data are also made available in analytical publications and in the form of public-use data tapes.

  CONTACT: Harry M. Rosenberg, Ph.D.; National Mortality Statistics Program, (301)436-8884

- **Development of Operational Criteria for the Classification of Suicide**. NCHS participates in a working group of individuals representing agencies and organizations who are interested in improving the reporting of suicides in the United States (see CDC entry). There was concern that many suicides are reported as accidents or natural causes. The working group has developed criteria to assist medical legal officers (coroners and medical examiners) in their investigation of possible suicides and in making the decision as to whether it was suicide. These criteria will be distributed through appropriate professional organizations representing coroners and medical examiners with a recommendation that the criteria be used. It is anticipated these criteria will be of assistance to medical legal investigators and should improve the completeness of reporting of suicides.

  CONTACT: George A. Gay; Registration Methods Branch; (301)436-8815

best copy available

HEALTH CARE FINANCING ADMINISTRATION

PROGRAM: Medicaid (Title 19 of the Social Security Act)

ADDRESS: 6325 Security Blvd.; Room 429 East High Rise; Baltimore, Maryland 21207

CONTACT: Robert Wardwell, (301)594-9824

DESCRIPTION OF ACTIVITIES:

Although HCFA has no specific youth suicide program, the Medicaid program provides a wide range of medical services which may be relevant in the treatment of youths threatening or attempting suicide. These services include, but are not limited to, inpatient hospital services (diagnostic, screening, preventive, and rehabilitative services) and inpatient psychiatric services for individuals under age 21. HCFA also administers the home and community-based waiver program which is designed to allow States to offer a wide array of home and community-based services for individuals who would otherwise require medical care in an institutional setting. States have the flexibility to target an approved waiver program to individuals with certain medical conditions such as mental illness.

HEALTH RESOURCES AND SERVICES ADMINISTRATION

PROGRAM: Division of Child and Maternal Health

ADDRESS: 5600 Fishers Lane
Rockville, Maryland 20857

DESCRIPTION OF ACTIVITIES:

- **The Child and Adolescent Injury Prevention (intentional and unintentional)** program seeks to reduce mortality and morbidity resulting from intentional or unintentional injury and violence among children and adolescents, including Native Americans and handicapped youngsters.

  The program sponsors activities such as community education programs, school-based prevention programs, efforts to prevent drinking and driving, epidemiologic studies, household surveys, and legislative efforts to promote use of seat belts and car seats.

  Benefits of the injury prevention program include reduced mortality for young people, reduced severity of injuries, fewer school absences, shorter lengths of hospitalization, reduced pain, fear, sense of loss, and separation from family, and reduced financial costs resulting from injuries.

  CONTACT: Arthur S. Funke, Ph.D., Room 7A-13, (301)443-6600.

- **Emergency Medical Services for Children and Youth**

  In order to reduce mortality, morbidity from life threatening injury, and violence (including self-inflicted injuries), this program supports public education, training, and education of emergency medical technicians and others concerning trauma and critical illness among children and youth. It also provides timely on-site emergency care, triage services, and therapeutic transport to most appropriate facility.

  CONTACT: Arthur S. Funke, Ph.D., Room 7A-13, (301)443-6600.

- **Adolescent Health Training** provides health personnel with knowledge, skills, and experience required to improve the health of adolescent populations and reduce health problems including the risk of life threatening behaviors and suicide. The training program supports formal education and practicum in institutions of higher learning as well as offering continuing education in conferences, health departments, and other practice settings.

  CONTACT: James Papai, Room 6-17, (301)443-2340.

- The **Adolescent Health Program** develops and supports Federal, State, and private sector efforts on behalf of improved adolescent health and reduced rates of mortality, morbidity, and other health problems.

  CONTACT: Joann Gephart, R.N., M.S.N.; Room 7A-13, (301)443-4026.

- **Maternal and Child Health Research** promotes and supports research that will yield knowledge of maternal, infant, child, and adolescent health including knowledge of determinants and contributing factors associated with youth suicide and other aspects of adolescent health. This program also seeks effective methods for health promotion and maintenance that can be readily adapted and used in health training and service programs.

  CONTACT: Gontran Lamberty, Dr.P.H., Room 6-17, (301)443-2190.

- The **Office of the Chief Psychologist** supports education and training efforts to increase the competence of all health professionals. It aims to improve psychological and behavioral aspects of health and to reduce psychological/behavioral risks to health. The program wishes to increase attention among health professionals to suicide.

  CONTACT: Arthur S. Funke, Ph.D., Room 7A-13, (301)443-6600.

- The **Sudden Infant Death Program** offers counseling to parents who have lost an infant suddenly and unexpectedly. It develops and promotes educational materials directed to parents, emergency personnel, clergy, health professionals, and police. It is anticipated that this program will help to reduce the severity and duration of anger and depression and other undesirable effects of infant death among adolescent and other parents as well as reduce family disruption, psychiatric problems, suicide attempts, and other health threatening behaviors.

  CONTACT: Geraldine Norris-Funke, M.S., R.N., Room 7A-13, (301)443-6600.

INDIAN HEALTH SERVICE

PROGRAM: Division of Clinical and Prevention Services
Mental Health Branch

ADDRESS: 5600 Fishers Lane, Room 6A-55
Rockville, Maryland 20857
(301)443-1083

CONTACT: Scott Nelson, M.D. (301)443-3024

DESCRIPTION OF ACTIVITIES:

Within the IHS client population, 15 to 24 year olds are more likely to commit suicide than their counterparts in the general U.S. population. This condition has existed for many years and is considered to be a symptom of the many serious mental health problems prevalent in the communities served by the IHS. The IHS uses several approaches to address the problem. These efforts are managed through the IHS Mental Health Program, a community oriented clinical and consultation service, responding primarily to reservation populations.

The IHS Mental Health Program provides:

- **Clinical services** which concentrate on stress management, alcohol and drug abuse, abuse and neglect, handicapping conditions, suicide and violent behaviors per se;
- **Technical assistance** to communities and tribal councils; and
- **Special Initiative Team** (located in Albuquerque, New Mexico) has been formed to provide technical assistance to communities to help them plan organized efforts and develop techniques to implement community health programs designed specifically to combat suicide and other forms of violent behaviors.

OFFICE OF HUMAN DEVELOPMENT SERVICES

PROGRAM: Family and Youth Services Bureau/Administration for Children, Youth and Families

ADDRESS: Post Office Box 1182
Washington, D.C. 20013
(202)472-4426

CONTACT: Paget Wilson Hinch, Associate Commissioner

DESCRIPTION OF ACTIVITIES:

In fiscal year 1985, the Family and Youth Services Bureau funded seven regional research and demonstration projects.

- **Computer Assisted Training in Teen Suicide Prevention for Runaway Center Staff (The Corner Drug Store, Inc., Gainesville, Florida).** This project developed a computer assisted training system in suicide prevention for the runaway shelter staff of the Southeastern Network of Runaway, Youth, and Family Services. This network provides residential care to more than 10,000 adolescents annually in 35 centers in eight states. The interactive instructional system tailors suicide assessment and intervention skills to an audience of runaway shelter employees.

  CONTACT: Sara V. Jarvis; (904)377-2976.

- **Preventing Suicides Among Youth Using Runaway Shelters (Human Services Development Institute, Portland, Maine).** This project developed materials (training manuals, films, and publications) for an intensive training program to assist runaway shelter personnel in preventing suicides among the youthful residents. The project included a population profile of suicidal runaway youth--who the teenagers were, what interventions worked for them and what early signals they displayed--and an assessment of the services most appropriate for use by runaway shelters and community mental health agencies.

  CONTACT: Loren Coleman, M.S.W., A.C.S.W.; (207)780-4430

- **Suicide Prevention in Runaway Youth Centers (Washington University School of Social Work, St. Louis, Missouri).** This program is developing and comparing the effectiveness of two types of group treatment which provide continuing care after runaway youths leave emergency shelters. "Social Support" groups attempt to develop peer support for runaways that will continue after youths leave the shelters. "Competence building" groups train youths in problem-solving skills, social skills, skills to cope with feelings of depression anger, and stress. Intervention curricula, manuals, evaluation instruments, and research reports developed during the project will be disseminated.

  CONTACT: Janan Hartford; (314)889-5824

- **Runaway and Homeless Youth Suicide Prevention Training Project (Mental Health Association of North Dakota, Bismark, North Dakota).** This project provides training and materials to staff in 20 shelter, group, and residential facilities who deal with runaway and homeless youth in 4 states, to North Dakota law enforcement officials, hospital personnel, and human service providers. The program wishes to increase awareness of the suicidal risk in these youth, early identification of risk, and establish formal linkages between shelter personnel and health care providers.

  CONTACT: Lilian Wacker; (701)255-3692

- **Suicide Prevention and Treatment in Runaway Shelters (Research Foundation for Mental Hygiene, New York, New York).** This project's goals are to: compile data on the current practices of assessment and triage of runaways at risk for suicide; develop procedures to screen for suicidal risk, train runaway center staff to use these procedures; coordinate a service network; establish and evaluate treatment groups for runaways; develop training manuals and videotapes for runaway shelter staff and clinicians treating suicidal runaways; and disseminate materials to runaway shelters, community mental health centers, and clinical researchers nationwide.

  CONTACT: Mary Jane Rotheram, Ph.D.; (212)960-2332

- **Suicide Prevention Program for Runaway Youth Shelters (Suicide Prevention and Crisis Center, Burlingame, California).** This project assists shelter personnel in acquiring the knowledge and tools necessary to identify and respond to suicidal adolescents seeking shelter services. The project includes: a survey of 48 shelters in the western region, a pilot shelter training program with an evaluation component; a workbook for youth, a training curriculum and dissemination of materials developed during the project.

  CONTACT: Center business office: (415)877-5604

- **Huckleberry House (Columbus, Ohio).** This program trains staff and volunteers in specialized techniques to provide early detection, intervention, and treatment services for runaway youth with a high risk for suicide. The project also evaluates the effectiveness of its training procedures. The material developed by the project includes screening procedures and a training manual and curriculum for counselors, para-professional staff, and volunteers at the shelter. Another aspect of this project is to establish base line data regarding the relationship of suicidal youth to youth with family and abuse problems.

  CONTACT: Lehni Lebert, Project coordinator; (614)294-5553

OFFICE OF INSPECTOR GENERAL (OIG)

PROGRAM: Office of Analysis and Inspections
Youth Suicide Report
Inventory of State Initiatives in Addressing Youth Suicide

ADDRESS: 2901 Third Avenue, M/S 309
Seattle, Washington 98121

CONTACT: Kaye D. Kidwell, Deputy Regional Inspector General

DESCRIPTION OF ACTIVITIES:

The Office of Analysis and Inspections conducted a qualitative national program inspection of youth suicide. The Office held more than 300 interviews, in-person and by telephone, with persons from randomly selected community service agencies, who provide services to young people, or who are involved in suicide research and prevention. The study sought to assess the extent to which HHS-funded programs are involved in efforts to prevent youth suicide, review how selected communities are responding to the problems associated with youth suicide, and identify barriers and gaps which hinder delivery of services to suicidal youth and/or their families. The report, *Youth Suicide*, presents the results of these interviews.

The report, *Inventory of State Initiatives in Addressing Youth Suicide*, reflects findings based on 283 telephone interviews with officials in 50 states from five program areas: education, mental health, maternal and child health, drug and alcohol abuse, and children's services.

APPENDIX

MEMBERS OF THE SECRETARY'S TASK FORCE ON YOUTH SUICIDE

Shervert H. Frazier, M.D.
Chairman
Formerly, Director
National Institute of Mental Health

Carolyn Doppelt Gray
Acting Deputy Assistant Secretary
Office of Human Development Services

M. Gene Handelsman
(served until June 1986)
Formerly, Deputy Assistant Secretary
Office of Human Development Services

Robert B. Helms, Ph.D.
Acting Assistant Secretary for Planning and Evaluation
Office of the Secretary

Jerome H. Jaffe, M.D.
(served until June 1986)
Director, Addiction Research Center
National Institute on Drug Abuse

Stephanie Lee-Miller
Assistant Secretary for Public Affairs
Office of the Secretary

Markku Linnoila, M.D.
Clinical Director, Division of Intramural Clinical and Biological Research
National Institute on Alcohol Abuse and Alcoholism

Dodie T. Livingston
Commissioner, Administration for Children, Youth, and Families
Office of Human Development Services

Robert G. Niven, M.D.
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Formerly, Director, National Institute on Alcohol Abuse and Alcoholism

Everett R. Rhoades, M.D.
Director, Indian Health Service
Health Resources and Services Administration

Mark L. Rosenberg, M.D., M.P.P.
Assistant Director for Science
Division of Injury Epidemiology and Control
Center for Environmental Health and Injury Control
Centers for Disease Control

Charles R. Schuster, Ph.D.
Director
National Institute on Drug Abuse

Robert L. Trachtenberg
Deputy Administrator
Alcohol, Drug Abuse, and Mental Health Administration

STAFF

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Special Assistant to the Deputy Director
National Institute of Mental Health

Heather A. Pack, Policy Coordinator
Executive Secretariat
Office of the Secretary

ALTERNATES

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Assistant Director for Medical and Professional Affairs
Office of Science
National Institute on Drug Abuse

Jack Durell, M.D. (served until July 1986)
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National Institute on Drug Abuse

Paget Wilson Hinch
Associate Commissioner, Family and Youth Services Bureau
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Office of Human Development Services

Chuck Kline
Deputy Assistant Secretary for Public Affairs - News
Office of the Secretary

Arnold R. Tompkins
Deputy Assistant Secretary for Social Services Policy
Office of the Assistant Secretary for Planning
and Evaluation
Office of the Secretary

WORK GROUPS OF THE SECRETARY'S TASK FORCE ON YOUTH SUICIDE

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Alec Roy, M.B.
Visiting Associate
National Institute on Alcohol Abuse and Alcoholism

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Dodie T. Livingston, Cochairperson
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Pamela C. Cantor, Ph.D.
Executive Director, National Committee on Youth Suicide Prevention
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Los Angeles, California

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Cochair of the California State Youth School Suicide Prevention Group
Los Angeles Suicide Prevention Center
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Paget Wilson Hinch
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Administration for Children, Youth, and Families
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STRATEGIES FOR THE FUTURE

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Jay A. Winston, Ph.D.
Director, Center for Health Communication
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Guest Participants

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College of Physicians and Surgeons of Columbia University
Chief, Division of Mental Health Utilization and Policy Research
New York State Psychiatric Institute
New York, New York

Jerry Silverman
Policy Analyst, Office of the Assistant Secretary for Planning and Evaluation
Office of the Secretary

PAPERS COMMISSIONED BY THE SECRETARY'S TASK FORCE ON YOUTH SUICIDE

WORK GROUP ON RISK FACTORS FOR YOUTH SUICIDE

Sociodemographic, Epidemiologic, and Individual Attributes

Paul C. Holinger, M.D., M.P.H., Associate Professor of Psychiatry, Rush-Presbyterian - St. Luke's Medical Center, Chicago, Illinois

Daniel Offer, M.D., Professor and Chairman, Department of Psychiatry, Michael Reese Hospital and Medical Center, Chicago, Illinois

Preparatory and Prior Suicidal Behavior Factors

Norman L. Farberow, Ph.D., Cofounder, The Institute for Studies of Destructive Behaviors and Suicide Prevention Center, Los Angeles, California

Social and Cultural Risk Factors for Youth Suicide

Carol A. Huffine, Ph.D., Director of Research, California School of Professional Psychology, Berkeley, California

Family Characteristics and Support Systems as Risk Factors for Youth Suicide

Cynthia R. Pfeffer, M.D., Associate Professor of Clinical Psychiatry, Cornell University Medical College, New York Hospital - Westchester Division, White Plains, New York

Contagion as a Risk Factor for Youth Suicide

Lucy Davidson, M.D., Medical Epidemiologist, Division of Injury Epidemiology and Control, Center for Environmental Health and Injury Control, Centers for Disease Control, Atlanta, Georgia

Madelyn Gould, Ph.D., Assistant Professor of Clinical Social Sciences in Psychiatry and Public Health, Adolescent Study Unit, College of Physicians and Surgeons of Columbia University, New York, New York

Stress and Life Events

Eugene S. Paykel, M.A., M.D., F.R.C.P., F.R.C.Psych., Professor of Psychiatry, University of Cambridge, Addenbrook's Hospital, Cambridge, England

Sexual Identity Issues

Joseph Harry, Ph.D., Associate Professor, Department of Sociology, Northern Illinois University, De Kalb, Illinois

"Major Psychiatric Disorders" as Risk Factors in Youth Suicide

Maria Kovacs, Ph.D., Associate Professor of Psychiatry, University of Pittsburgh School of Medicine, Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania

Joachim Puig-Antich, M.D., Professor of Psychiatry, Chief of Child and Adolescent Psychiatry, University of Pittsburgh, School of Medicine, Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania

Personality as a Predictor of Youthful Suicide

Allen Frances, M.D., Professor of Psychiatry, Cornell University Medical Center, New York Hospital, New York, New York

Susan J. Blumenthal, M.D., Chief, Behavioral Medicine Program, Health and Behavior Research Branch, Division of Basic Sciences, National Institute of Mental Health, Rockville, Maryland

Substance Use and Abuse: A Risk Factor in Youth Suicide

Marc A. Schuckit, M.D., Professor of Psychiatry, University of California at San Diego, School of Medicine, Director, Alcohol Research Center, San Diego Veterans Administration Medical Center, San Diego, California

Judith J. Schuckit, Ph.D., Del Mar, California

Methods as a Risk Factor in Youth Suicide

J. William Worden, Ph.D., Assistant Professor of Psychiatry, Harvard Medical School, Boston, Massachusetts

Neurotransmitter Monoamine Metabolites in the Cerebrospinal Fluid as Risk Factors for Suicidal Behavior

Marie Asberg, M.D., Professor, Department of Psychiatry and Psychology, Karolinska Hospital, Stockholm, Sweden

Post Mortem Studies of Suicide

Michael Stanley, Ph.D., Associate Professor of Clinical Psycho- pharmacology, Departments of Psychiatry and Pharmacology, College of Physicians and Surgeons of Columbia University, New York State Psychiatric Institute, New York, New York

The Neuroendocrine System and Suicide

Herbert Meltzer, M.D., Bond Professor of Psychiatry, School of Medicine, Case Western Reserve University, Cleveland, Ohio

Martin T. Lowy, Ph.D., Department of Psychiatry, Case Western Reserve University, Cleveland, Ohio

Genetic and Suicidal Behavior

Alec Roy, M.B., Visiting Associate, Division of Intramural Clinical and Biological Research, National Institute of Alcohol Abuse and Alcoholism, Bethesda, Maryland

Summary and Overview of Risk Factors in Suicide

Frederick K. Goodwin, M.D., Administrator, Alcohol, Drug Abuse, and Mental Health Administration, Rockville, Maryland

Gerald L. Brown, M.D., Senior Investigator, Biological Psychiatry Branch, Division of Intramural Research Programs, National Institute of Mental Health, Bethesda, Maryland

WORK GROUP ON PREVENTION AND INTERVENTIONS IN YOUTH SUICIDE

Primary Prevention: A Consideration of General Principles and Findings for the Prevention of Youth Suicide

Robert D. Felner, Ph.D., Professor of Psychology, University of Illinois at Champaign/Urbana, Champaign, Illinois

Morton M. Silverman, M.D., formerly Associate Administrator for Prevention; Alcohol, Drug Abuse, and Mental Health Administration, Rockville, Maryland

A Critical Review of Preventive Intervention Efforts in Suicide, with Particular Reference to Youth Suicide

David Shaffer, M.B., B.S., F.R.C.P. Psych, Director, Division of Child Psychiatry, Professor of Psychiatry and Pediatrics, Columbia University, New York, New York

K. Bacon, Ph.D., Clinical Psychologist, New York State Psychiatric Institute, New York, New York

Overview of Prevention Efforts in Adolescent Suicide

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Characteristics of Suicide Prevention/Intervention Programs: Analysis of a Survey

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Gay Male and Lesbian Youth Suicide

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Prevention of Adolescent Suicide Among American Indian and Alaskan Native Peoples

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Black Youth Suicide: Literature Review with a Focus on Prevention

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The Role of Volunteer Workers in Suicide Prevention Centers

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Preventing Suicide by Improving the Competency of Caregivers

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The Samaritans and the Prevention of Youth Suicide

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Evaluation and Management of Suicidal Risk in Chemically Dependent Adolescents

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Overview of Early Detection and Treatment Strategies for Suicidal Behavior in Young People

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Specific Treatment Modalities for Adolescent Suicide Attempters

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Perspectives of Youth on Preventive Intervention Strategies

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Mass Media and Youth Suicide Prevention

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Intervention Strategies on Environmental Risk Reduction for Youth Suicide

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School-Based Prevention Programs

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Estimating the Effectiveness of Interventions to Prevent Youth Suicides: A Report to the Secretary's Task Force on Youth Suicide

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Suicide Attempts in Teen-Aged Medical Patients

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Suicide Ideation and Attempts: The Epidemiologic Catchment Area Study

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Developing a Suicide Screening Instrument for Adolescents and Young Adults

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Preventive Interventions in the Health and Health-Related Sections with Potential Relevance for Youth Suicide

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The Contribution of Social Services to Preventing Youth Suicide

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Preventing Youth Suicide Through Education

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Intervention in the Media and Entertainment Sectors to Prevent Suicide

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Interventions Through Business and Philanthropy to Prevent Youth Suicide

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